

UC-NRLF



B 4 175 685

THE
SOUTH ITALIAN VOLCANOES

BEING THE ACCOUNT OF AN EXCURSION TO THEM
MADE BY ENGLISH AND OTHER GEOLOGISTS IN 1880
UNDER THE AUSPICES OF THE
GEOLOGISTS' ASSOCIATION OF LONDON
WITH PAPERS ON THE DIFFERENT LOCALITIES

BY

MESSRS. JOHNSTON-LAVIS, PLATANIA, SAMBON, ZEVI
and Madame ANTONIA LAVIS

INCLUDING

THE BIBLIOGRAPHY OF THE VOLCANIC DISTRICTS
AND 16 PLATES

EDITED BY

H. J. JOHNSTON-LAVIS

M. D., M. R. C. S., B. & S. Sc., F. G. S., etc.

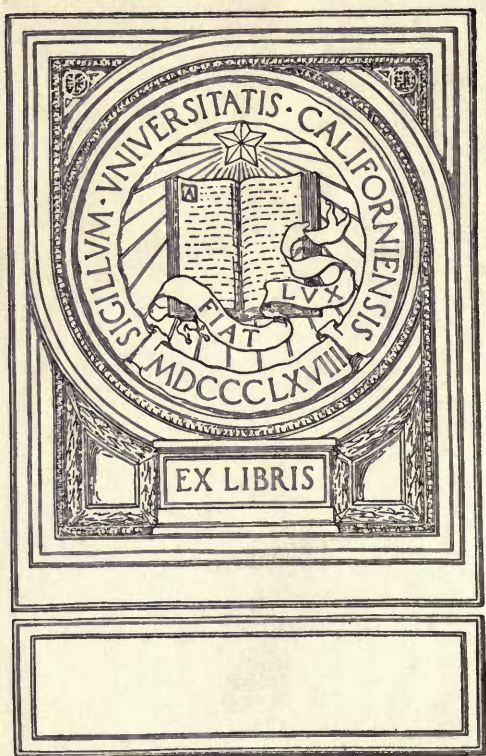


NAPLES

F. FURCHHEIM, 59, PIAZZA DEI MARTIRI
1891

BERKELEY
LIBRARY
UNIVERSITY OF
CALIFORNIA

EARTH
SCIENCES
LIBRARY



brown

THE SOUTH ITALIAN VOLCANOES

BEING THE ACCOUNT OF AN EXCURSION TO THEM
MADE BY ENGLISH AND OTHER GEOLOGISTS IN 1889
UNDER THE AUSPICES OF THE
GEOLOGISTS' ASSOCIATION OF LONDON
WITH PAPERS ON THE DIFFERENT LOCALITIES

BY

MESSRS. JOHNSTON-LAVIS, PLATANIA, SAMBON, ZEZI
and Madame ANTONIA LAVIS

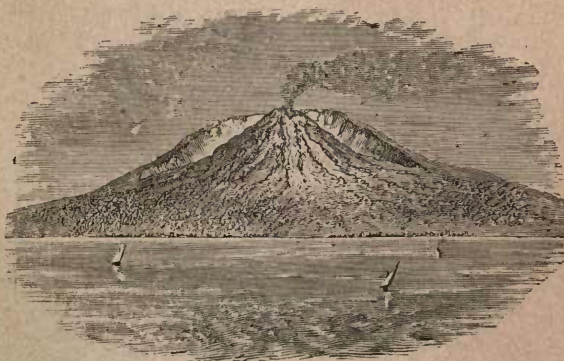
INCLUDING

THE BIBLIOGRAPHY OF THE VOLCANIC DISTRICTS
AND 16 PLATES

EDITED BY

H. J. JOHNSTON-LAVIS

M. D., M. R. C. S., B.ès Sc., F. G. S., etc.



NAPLES

F. FURCHHEIM, 59, PIAZZA DEI MARTIRI

1891

QE 527

14

EAF 4
SCIENCES
LIBRARY

to you
associated

PREFACE

The British Isles, as every geologist knows, fortunately or unfortunately according to the way the question is viewed, possess no active or even recently extinct volcanoes, nor are our islands often convulsed by earthquakes. Nevertheless, Englishmen stand pre-eminent as vulcanologists and seismologists — as the names of Daubeny, Scrope, Lyell, Geikie and Judd amongst the former and Mallet, Milne, Ewing and Gray may amongst the latter be taken as admirable examples. Of late years British geologists have tended to neglect recent volcanoes, both as to investigating their so far unexplained phenomena or making themselves acquainted with those already known, often not even with their principal features. In fact we have but to read many of the papers on the older volcanic deposits of our country to be struck with the little practical acquaintance of the writers with characteristics of active fire vents, but who yet endeavour to unravel the history and phenomena of igneous rocks, that have been subjected to inestimable modifications since they came into existence.

It is my lot to see year after year pass by with comparatively few English geologists or students visiting this region of active and recent volcanoes, whilst numerous German, Austrian and American geologists or students pay honour to the forges of Vulcan. In 1888 at the Delegates dinner at the Brit. Association meeting of Bath, to which I had been kindly invited, I suggested that a big field excursion to the south Italian volcanic region should be made, and expressed a desire that the different societies, then represented, should take part in it. Several objections were raised as to the season, length of excursion, etc. but the idea in general was favourably accepted and I was asked to take the necessary steps to organise it locally in Naples, whilst the Geologists' Association of London took the initiative in Great

Britain. Everything went smoothly at first but later proper notice was not given to the other societies, the travelling arrangements were delayed to a useless date and the excursion secretary in London, who was to have acted as administrator, some three days previous to the start from England, became invisible. In Naples a local committee had been formed, which had made all the necessary arrangements with the Minister of Public Instruction, Comm. Bosselli, who took much interest in the excursion, the Minister of Posts and Telegraphs, the railway companies, and a steam ship had been retained, but could not be contracted for till the number of the excursionists was sent from London. Unfortunately this advice never came, the steamer could only be chartered on the arrival of the party in Naples, resulting in the notice being too short to get the ship fit for comfortable accommodation. Besides the general as well as a large portion of the scientific direction, I suddenly had heaped upon my shoulders the no light burden of the administrative department, in consequence of the absence of the excursion secretary. Fortunately Dr. L. Sambon the active local secretary was a most valuable aid in fulfilling the latter office and had it not been for him I fear the trip would have been a failure.

It must be remembered that to take a party of 50 or more through southern Italy and especially the Lipari islands, Etna and Roccamonfina is a very serious matter and can in no way be compared to a similar trip in the British Isles. The excursion was not one of half or one day, or even a week, but of six weeks amongst some of the most unbusiness-like people of Europe. Notwithstanding all these difficulties, the undertaking proved to be a highly successful one and even the very few well known habitual grumblers, later on admitted they had thoroughly enjoyed themselves. No severe illness, no grave accident or misfortune of any kind occurred to the party, although we visited regions considered by authorities who know the want of every necessity and comfort as an act of serious risk.

That the excursion has already commenced to bring forth some fruit is shown by several papers on the region that have appeared from the pens of some of the party, and by others now in preparation.

Much of the success is also due to the extremely kind way in which the public authorities did everything they could to facilitate our undertaking, as likewise several private individuals, and this opportunity is taken to thank them in our names as well as in those of the excursionists who owe so much to them.

A list of these benefactors we append at the end of this preface. Besides these we are grateful for several invitations from different local authorities and persons to visit their interesting regions but which we were obliged to decline with regret, on account of our already overcharged program.

It was the hope of the editor to have had short and concise articles from each special director, and most had promised and have repeated their promises; although eighteen months have passed some have not been fulfilled and this volume has been closed, after months of delay.

The sad premature death of Prof. O. Silvestri, who had been such an instructive guide and kind colleague, but a few months after the excursion must be deeply regretted by all those who had the pleasure and benefit of his direction. He had promised a long chapter on Etna but only a few pages had been written when he was cut off from further work.

Another cause of delay was the bibliographical list which entailed an amount of labour that few can conceive except those that have worked at it, but it is hoped that its value will be appreciated.

THE
GEOLOGISTS' ASSOCIATION AND OTHER EXCURSIONISTS
EXPRESS THEIR DEEP GRATITUDE
FOR
HOSPITALITY, HELP, AND KINDNESS
RENDERED BY THE

Comm. P. Boselli, Minister of Public Instruction
Minister of Posts and Telegraphs
Mayor of Lipari
Signor Seguenza
Signor Tommaso Carnevale of Lipari
A. E. Narlian Esqr, of Vulcano and Lipari
Mayor of Acireale
Signori Gaetano and Giovanni Platania of Acireale
Signori Gaetano Renda of Stromboli
Signori Pennisi of Acireale
Prof. O. Silvestri of Catania
Mayor of Biancavilla

Marchese Favare of Biancavilla and Palermo
Mayor of Naples, Commendatore N. Amore,
Prof. F. Bassani
Prof. A. Scacchi
Prof. Dell' Erba
On. Dini
Prof. A. Spatuzzi
Dr. Maione
Capt. Vercilli
Dr. A. Dohrn
Dr. Eisig
Mr. Linden
Dr. Cerio of Capri
Mr. Ostermoore of Capri
Dr. Roccatagliata
Mayor of Casamicciola
Rev. J. C. Fletcher —
Prof. Tamburrini, Director of the Liceo Nifo, of Sessa
Aurunca
Mayor of Sessa Aurunca, signor Botta
Mayor of Roccamonfina, signor De Nicola
Signor C. Pastore
Father Monaco
Father O. Piscicelli
Dr. F. Mohrhoff
Prof. R. Lanciani
Count Giuseppe Savorgnan de Brazza
Cav. Ing. Demarchi
Prof. Portis
Prof. Strüver
Prof. R. Meli
Dott. Tellini
Dott. Clerici
Signor P. Zezi
Cav. L. Nesbitt of Albano Laziali
Mayor of Tivoli, Cav. Tomei
Onorevole T. Tittoni
Signori Maggiorani

ALL RIGHTS RESERVED

CHAPTER I.



HE ROUND TRIP

IN DETAIL

BY

DR. JOHNSTON-LAVIS

EXCURSION TO THE SOUTH ITALIAN VOLCANOES.

By H. J. JOHNSTON-LAVIS, M.D., F.G.S.

(Read January 3rd, 1896)

On Tuesday, September 17th, at Messina, the son of the late Prof. Seguenza and Messrs. Platania, of Acireale, met the party, and acted as directors. The steep escarpment of Taormina, composed of Triassic and Liassic strata, which have given rise to much controversy, was examined in the walk up to the town from the station.

Early the next morning the members of the excursion returned by train to Messina, to embark on the "Villa San Giovanni," a small private steamer hired for the week's trip to the Lipari islands. Just after mid-day we steamed out of the harbour and through the Straits, obtaining a splendid view of Scilla, with the lofty triple-stepped mountain of Aspromonte, which probably owes its configuration to as many planes of marine denudation. The port of Lipari was reached at sunset, when some of the less seaworthy members landed to pass the night. A portion of the party walked to the south end of the island to watch the explosions from Vulcano, and were repaid by seeing one dust-cloud give out many flashes of lightning. The next morning (September 19th), weather being favourable, we steamed out soon after sunrise and reached Stromboli early in the forenoon, where the ascent was made on the east side of the Sciarra. The summit was reached by a climb of about three hours, with short interruptions during which the party helped themselves to the splendid grapes from the vines through which much of the track lay. At the top I pointed out the sites of one or more ancient craters, as well as the peculiar position of the present vent, which occupies a situation similar to that of a parasitic cone, at a high elevation, but yet a considerable distance below the mountain summit. On account of the great depth of the sea at the north foot of the island, all the ejected materials that cannot remain at their maximum angle of repose roll down to the sea and continue their course onwards to the submarine foot of the cone. Five of the party photographed the crater from the overhanging summit. There were five active blow-holes, or small vents and cones, each of which from

time to time ejected with considerable violence showers of hot, pasty lava fragments, often accompanied by splendid vortex rings of smoke. The party then descended to the level of the vents on the west side of the Sciarra, from which also a fine view and many photographs were obtained. The westernmost vent showed a small quantity of pasty lava oozing from it for a ~~inch or two, and then breaking off in pieces,~~ which bounded down the steep slope of the Sciarra to the sea. Many augite crystals were collected, and the party then descended over a steep talus of sand and winding paths to the town, and embarked on the steamer. The ship steamed round opposite the Sciarra, where, two hours after dark, the monotony of the peculiarly hard bread (compared by some to trachyte) was relieved by the splendid display of Nature's fireworks.

At daybreak we steamed for the islets of Basiluzzo, Datolo, Lisca Bianca, Lisca Nera, and Bottaro, on some of which a landing was made, and a few of the members attempted to see the Caldaje, a well-known submarine fumarole, but owing to the roughness of the sea its exact position could not be made out. The party then landed on Panaria, where the typical liparite is seen to perfection. There I drew the attention of the members to the very large number of worked obsidian flakes which are met with in the surface soil, though no natural source of this rock occurs at the island. These, together with numerous little Greek statuettes of household gods, indicate the colonization of this island in very early times. On a visit to Lisca Bianca also, some years since, I found a small number of obsidian flakes on that island. At Panaria the party collected a considerable number of flakes and a few implements.* The same evening the port of Lipari was reached, and as the steamer coasted along

* From the house top on Panaria, where the party had breakfasted, a fine view of the neighbouring islets could be obtained. I drew attention to the fact that Panaria, Basiluzzo, and the other islets constituted a volcanic pile, chiefly submarine but which in many respects might be compared to Lipari itself. In fact, were the sea bottom raised a few fathoms, an island of very considerable extent would be formed, the higher eminences of which would be constituted by the few patches of dry land we saw before us. Panaria and Basiluzzo represented two enormous domes of a highly acid trachyte or rhyolite or liparite, as variously named, which had oozed forth in a highly pasty condition without much explosive action. Some portions of the magma were less glassy than others, and as these had been drawn out just as the layers of butter and dough in a flaky pie-crust, they had produced a similar stratified structure at these two islands. If you compare the appearance of the natural section of Basiluzzo with the artificial experiment of Prof. Reyer ('Theoretische Geologie,' Stuttgart, 1888, Fig. 153, p. 152, copied into Prof. Judd's 'Volcanoes,' Fig. 43, p. 126) you will notice the striking resem-

the east coast of that island those on board were able to examine the principal geological features as they were pointed out to them. From north to south these are the great white crater of explosion of Campo Bianco, and the enormous obsidian stream that afterwards welled out from it, breaching it to the north-east, and flowing down into the sea, now known as the Rocche Rosse and Punta della Castagna. The far greater height of the south wall of the crater, with its peculiar hump, now known as Monte Pelato, I pointed out as due to the explosion occurring on the side of an old dolerite cone, which, covered by the essential ejectamenta of the Campo Bianco crater, constitutes this Monte Pelato. This structure is revealed in the sea-cliff where the relations of the dolerite and white pumice are well seen. Farther to the south, the geologists were shown another obsidian stream which issued on the east side of Mte. St. Angelo, and flowed nearly down to Canneto. The next to attract attention were the twin cones of Monte Rosa and their peculiar imbricated slopes, due to the interstratifications of streams of dolerite with scoria and other fragmentary deposits, which were being undercut by the sea. Finally, the spherulitic rock upon which the Castle of Lipari was built, was also indicated.

A visit to the Island of Vulcano, which has been in a state of eruption since August 3rd, 1888, was the business of the next day. Landing at the Porto di Levante, the first thing that struck the attention of the party was Mr. Narlian's cutter with its side staved in by one of the projectiles at the beginning of the eruption, although the boat was more than a kilometre distant from the crater. The holes in the roof and walls of Mr. Narlian's villa, the desolation of the vine-plantation and broom scrubs, many of which had been kindled and burnt by the red-hot projectiles, and the deep layer of grey volcanic dust on everything, formed a striking picture of the desolation caused by a small eruption of a small volcano. As we approached the foot of the cone we were impressed by the projectiles scattered about in large numbers, many of which were of great size. One still hot, and therefore recently ejected, was about a cubic metre in size and

blance of the two. In fact, there is good reason to believe that important geographical changes have been brought about in historic times, and we have indisputable evidence of endogenous activity in the solfatara of Lisca Bianca and the fumarole of Le Caldaje.

nearly a kilometre in a straight line from the crater. Most of these bodies consist of a mass of very acid obsidian pumice, covered by a crust of obsidian, cracked and bent up in a very curious manner, which I have described elsewhere as *bread crust structure*.*

This I pointed out to be due to the obsidian reaching that intermediate stage between a liquid and a solid, or in other words a state of intense viscosity, like slightly warmed sealing-wax or hardened Canada balsam, which break when exposed to strong and violent mechanical stress, but bend under a slight and gradually applied one. The magma in the upper part of this volcanic chimney seems to be in this critical state, and, as the vapour collects and escapes from the more heated and fluid portion beneath the upper part, is broken in fragments and ejected, when it is relieved from the surrounding pressure and allowed to expand. The crust has cooled along the cracks before this, and continues to do so, as it is whirled through the air, and after its fall, whilst the interior expands at the same time, innumerable vesicles being formed from the water dissolved in the magma separating as steam. This expansion causes the cracking of the hardened crust, and in some cases protrusion through the crust. This expansion is proved not only by the cracking and protrusion, but also by the bending out in some cases of pieces of the crust and the drawing asunder of crystals, pieces of ancient dolerite and other rocks included in the magma, and attached to the walls of a vesicle.

The presence of these numerous projectiles, called "bombs" by some, was a warning; so the ascent to the crater was requested to be done in open order. After a tiring scramble, we reached its north-west edge. The old, deep crater is now replaced by a much shallower one, the sides and bottom of which are covered by obsidian dust, sand, lapillo, and projectiles of different kinds.

At the bottom we noticed a number of small, shallow, funnel-like pits in the sand, but no indication whatever of any activity, so much so that an unwary visitor might walk across it and probably notice nothing but a very high temperature. From time to time part or the whole of this crater-bottom is raised up by explosions of vapour and the essential eruptive material into

* H. J. J. L., 'The Recent Eruption of Vulcano,' 'Nature,' Vol. xxxix, p. 173, and "Further Notes on the Late Eruption at Vulcano Island," *ibid.*, Vol. xxxix, p. 109.

vast columns of dust, which rise to ten or more times the height of the volcano. Most of the coarser materials fall back into the crater, the distribution at a distance of the finer dust depending upon the force of the explosion and that of the wind.

During the greater of these explosions the bread-crust bombs are ejected to a considerable distance and electric discharges take place, which some of the party, who were fortunate enough to see one in the evening, described as having a peculiar green tint. We were able to remain at the crater's edge for two or more hours, during which upwards of a dozen explosions occurred, many of which five of us who were photographers have been able to register. We were at last driven away by a much more violent outburst, but on our way down did not fail to examine the fumaroles at the outer crater edge on the east side of the old obsidian stream. These were very active, giving out much vapour under pressure and depositing an abundance of realgar and sulphur and a little boracic acid.

The party then proceeded to the alum caves of the Faraglioni, whilst some bathed in the hot mineral streams gushing out on the shore close by, one well-known Professor of Mineralogy being very enthusiastic in collecting specimens of coquimbite, halotrichite, voltaite, and other rare alums in an exceedingly light Adamic costume, and fortunately for him no hand camera was in the vicinity. The triple-cratered doleritic cone of Vulcanello projecting from its plateau of lava, the formation of which has for the major part taken place in historic times, was next ascended and examined. As the different points were visited, the director explained the main features of interest, which will be reserved for a separate communication, they being too long to introduce here. After a very successful day the party embarked, with a rich collection of bombs, alums, and other specimens, on their return to Lipari, where the night was passed.

September 22nd was devoted to a trip on the Island of Lipari. Starting on mules and donkeys, we directed our steps to the east slope of Mte. St. Angelo, an old cone truncated by a crater of explosion. From the east side, at a very recent period, possibly historic, as the name would indicate, a stream of spherulitic obsidian oozed forth and flowed down the slope as a great, thick, viscous mass, known as the Forgia Vecchia reaching nearly to the beach. Comparatively little explosive

action seems to have preceded its outpouring. Over the actual vent are a few small craterets with diminutive rings of fragmentary material, which were formed towards the end of the eruption, and in one crater are the remains of the old gas-fissure from which the last emanations occurred, depositing on its walls hæmatite and granular fiorite. Quitting this point, the deposits of white pumice derived from the Campo Bianco crater begin to form a thicker and thicker covering as we approach that old eruptive centre. Soon the sunlit glittering snow-white flanks of Mte. Chirica stood looming out against the background of the blue sea. Here I was able to point out that these mountains, like the original Mte. Pelato, are dolerite cones simply covered with a mantle of white pumice, which in some points has been denuded off. A peculiar yellow band, representing an old vegetable soil, is here met with, dividing the upper white pumice of the Campo Bianco eruption from an older one of the same material, the point of origin of which is not clear without long and careful study of the intricate overlappings of different eruptive deposits.

The grand crater of Campo Bianco with its wall of white pumice deeply interested all the party. This locality, which supplies all the first-class pumice of the world, is drilled by thousands of tunnels made in search of the larger morsels. The value depends on the practically total absence of any porphyritic crystals, which, from their greater hardness, would stand out and scratch the surface being polished. The view I offered of its formation was this:—Beneath this point there existed a fissure or canal filled by a completely fused acid glass in which separation of “formed material” in the shape of felspar or other crystals had not commenced. The glass in the upper part of the conduit had gradually dissolved or absorbed a considerable quantity of water from the more superficial and aquiferous strata until the increased tension was sufficient to overcome the superincumbent pressure. A gigantic explosion was the result, drilling out the side of the old dolerite cone of Mte. Pelato, the first essential eruptive material being nothing more than the scum or froth of the glass caused by the conversion of the water dissolved in it into the state of vapour on the relief of pressure, just as separation of carbon-dioxide blows out part of the champagne when the cork is removed. Behind there is, more and more gradually welled up, the less aquiferous glass which breached the crater to the north and poured forward into the

sea, forming a great promontory. The outer portion, which cooled more rapidly, remained a more or less pure obsidian, whilst the interior was able to undergo an imperfect crystallization, so that the whole mass has become an intricate spherulitic mass. As at the Forgia Vecchia, the last eruptive act is represented by the small unimportant crater-rings around the source and a few blow-hole craters. Some members made the ascent of Mte. Pelato along the crater edge, upon which a very large mass of black obsidian has been projected by one of the last explosions, which is interesting as showing the conversion of the fragments formed by its collision with the ground into bread-crust bombs.

A descent was made along the east side of the Rocche Rosse obsidian stream to the beach, where the deposits of commercial pumice-stone were examined, after which we embarked on our steamer, which had come to meet us, the mules returning by the paths.

The following day was devoted to the Island of Vulcano. Starting early from Lipari, we steamed along the east coast of Vulcano, landing just beyond the Pta. dell' Asino. The ascent to the great platform over the steep slopes was very tiring, as the track lay over the loose dust recently ejected, and nearly every broom, brush, or tree was dead or stripped of leaves, and the day a very hot and oppressive one. At the height of about 450m., we passed a notch in the crater rim near the Pta. della Trovatina, where ancient, very finely stratified, dust beds are seen to perfection, traversed by an old radial dyke. Just beyond this point we rested in the shade of a few still surviving broom trees, and obtained a number of photographs of the explosions from Vulcano. Thence we proceeded to a small farmhouse, where a few grapes that had been able to resist the destructive effect of the falling volcanic dust were very acceptable. Close by I drew the attention of the party to a group of small olivine-basalt cones, La Sommata, where a number of beautiful, fusiform bombs and pieces of finely corded lavas were collected. This was a good point to give a general outline of the structure of the island, so far as two short visits have permitted me to make it out, and as it differs from the very simple arrangement we read of in text-books, it is perhaps worth repeating.

At a distant period two great cones grew up, that to the north-west of a line from So. dell, Arpa to Mte. Luccio being composed of trachytic rocks, and that to the south-east of

doleritic rocks. Which of these came first it is difficult to determine without a very detailed study, and it is not unlikely that they were contemporaneous, as Vulcanello and the present active cone of Vulcano have been. One or more grand explosive eruptions then truncated somewhat eccentrically to the north-west the great dolerite cone of the south half of the island. At a later date, one or more explosive eruptions likewise truncated the trachytic cone of the north half of the island somewhat eccentrically to the north-north-east of the original axis. Much of the filling up and conversion of the south crater into a raised plateau may be attributed to the materials ejected from the north crater. On this crater-plane fresh eruptions took place at Mt. Saraceno, at the junction of the two ancient explosion crater rings. From this cone part of the lavas poured down on the great crater-plane, Il Piano. Other outpours of basalts, with the formation of the cones of La Sommata, all helped to raise the floor of the great explosion-crater of the south half of the island to a plane. From the bottom of the crater of explosion in the trachyte cone, a new and at present active cone grew up, the later products of which are acid rocks, chiefly varieties of obsidian and its allies. In historic times, some distance to the north of the island, in the straits separating it from Lipari, eruptions of dolerite lava, scoria, lapillo, and dust took place, forming the present triple-cratered cone of Vulcanello with its surrounding platform of lava.

After a rough scramble the party descended to the Porto di Levante, embarked on the steamer, and steered for Messina, in the port of which town we passed the night.

Early the next morning, September 24th, we steamed out of the Messina harbour, and, after quitting the whirlpools, were much troubled by an increasingly rough sea, so that our hope of reaching Acireale and landing there was given up before we reached Taormina. The effect of sea-sickness on the majority resulted in the captain being ordered to land us at the first sheltered point. The operation of disembarkation, the finding of an ox-cart, and the transport of our luggage over part beach and part road to the Giardini Station, and our collapsed selves, must have presented a serio-comic side to the few observers of this group of disciples of Vulcan retreating from the domination of Neptune. That evening we arrived in Acireale and found ourselves once more amidst comparatively civilized life. There we were met by Prof. O. Silvestri, of Catania, and his son, who seems

to be a worthy pupil of his father. Here I handed over the reins of direction to Prof. Silvestri, satisfied that they were in more competent hands, the more so that I was really very ill. Messrs. Gaetano and Giovanni Platania—the former a Member of our Association, and an old travelling companion of mine in the Aeolian Islands, who had been of so much assistance in directing the party there, not only still continued to do so here, but in their native place of Acireale—rendered us most valuable services.

The following day we took carriages to Zafferana, and then, some on foot, others on mules, we ascended into the Val di Bove, Prof. Silvestri lucidly indicating and describing the important geological points along the way, such as the lava cascades of Val Calanna, the configuration and limits of the Val di Bove, the parasitic cones and lavas occupying its floor. Beneath the escarpment under Mt. Pomiciaro we were able to examine some of the radial dykes, the lava streams, and numerous other points of lithological interest. This was followed by an “*al fresco*” lunch, which unfortunately was cut short by a storm. A number of us pushed through the driving rain to near Lyell’s axis of Trifoglietto, from which point the sight is imposing, especially with the addition of the drifting clouds.

The same evening the excursionists had been offered a banquet by the municipality of Acireale, and on their return from the Val di Bove were pleasantly astonished on their entry to the town to find it artistically illuminated in their honour. After dinner, during which the very fine town band had played a series of pieces, toasts were drunk by some of our members, and replied to by the Sub-Prefect, the Syndic, and Messrs. Platania. This small, but pretty and clean town owes much to the late well-known Baron Panisi, who founded here a meteorological and seismological station, and in many other ways has been active in making Acireale, with its grand hotels and thermomineral establishment, what it now is, a place from which many continental Italian cities might take an example.

On Thursday, September 26th, under the direction of Messrs. Platania, on the path down to the beach, the different superposed doleritic lavas of Etna were examined, and after refreshment at one of the directors’ houses, we embarked on boats, which first conducted us to the remains of the Grotto delle Palumbe, where a thick stream of dolerite exhibits, for such a coarse-grained rock, very fine columnar structure. The

energetic rowing of the fishermen took us rapidly along the coast, where very ancient Etnean basalts are intricately interwoven with Pliocene clays; where lava-stream succeeds lava-stream; where the fig-cactus and the vine monopolize every metre of loose scoria or lapillo; and where at some points fine ferruginous springs gush out from the cliff-face.

On our landing at Trezza, the largest of the Cyclopean islands, Prof. Silvestri pointed out that it was in part composed of clay metamorphosed by the contact of the basalt forming the other part of the island. The members were able to observe numerous minute dykes extending into the clay from the main mass, and to collect some very creditable crystals of analcime from the basalt. This mineral has been subsequently introduced into the basalt in such great quantities as in some cases to convert it into a rock which has been called analcimite. Landing at Acicastello, the celebrated globular basalts, with their associated palagonite tuffs, containing herschelite, phillipsite, and other zeolites in abundance, furnished ample scope for observation and discussion by the party. A comparatively recent but non-historic lava-stream is seen at one point covering some of these more ancient Etnean productions. Before taking the train to Catania, a fine fan-shaped group of basalt columns was examined close to the station.

On Friday, September 27th, invited and conducted by Prof. Silvestri, the fine museum of the University was visited by the party. This collection, probably the finest vulcanological collection that exists, and especially the beautiful models of recent eruptions of Etna, and the collection of their ejectamenta, were much admired. Not less valuable are the fine series of rough rock-specimens, with their polished equivalents and large very thin sections from the same. The Sicilian sulphurs, ambers, and other minerals add to the beauty of the collection. The museum also contains a fine series of seismological instruments. The whole represents many years of toil on the part of Prof. Silvestri.

In the afternoon we drove to Biancavilla, noticing the numerous large lava-streams cut by the road, chiefly outflows of 1669. At Paterno, the so-called mud-volcanoes, or "Salse," were examined, which, although now comparatively inactive, in 1879 showed great activity. Here Prof. Silvestri gave a discourse on the phenomena of mud-volcanoes in general,

which he illustrated by those in the midst of which we were standing. He then conducted us to the neighbouring Acqua Grassa, which is seen to be two rectangular basins, containing about two cubic metres each of a ferruginous water in a constant state of ebullition from the escape of carbon-dioxide, constituting a splendid drinking water, of which most of us availed ourselves with gusto.

It was nearly dark when we arrived at Biancavilla, having made another stop to collect specimens of the angite-andesite at the foot of the cone of Mt. Calvario. At Biancavilla we had been kindly offered hospitality in the country-house of the Marquis di Favara, a most valuable help to us, for which the party were most grateful, as there is nothing approaching an hotel in the place. Soon after our arrival the Syndic, some of the municipal councillors, and the town band came to greet us, the latter playing to us whilst dining.

At daybreak the following morning we were up, and the large quadrangular court-yard presented a picturesque scene—with over twenty mules, many recalcitrant, lethargic muleteers, excited geologists, odd-looking baggage, with the writer running here and there, directing, scolding, hurrying, urging, and otherwise stimulating the guides and mule-drivers.

Notwithstanding that the starting had been ordered for five a.m., it was nearly six before we were all fairly on our journey. A splendid morning, Etna, standing out in all its grandeur, was a picture that few who saw it will not have indelibly engraved on their memory. Not less impressive were the numerous wild, rugged lava-streams that were crossed, alternating with vines and woodland, with here and there a gigantic parasitic cone. Thus we continued till near midday, when we halted at the cones of Grotta degli Archi to eat our well-earned lunch, which was followed by a demonstration from Prof. Silvestri of the way in which these cones were formed along a lateral fissure, now known as the Grotta degli Archi, or Grotto of Arches, a tunnel the upper portion of which we entered, representing the upper extremity of the now empty dyke, and forming an arched communication from one parasitic crater to the other.

Another few hours of climbing on our mules brought us past the eruptive fissure of 1879 to the edge of the Piano del Lago, beyond which all is desert. At about 5 p.m. we reached the

Observatory, and, depositing our mules and baggage, I called upon those near by to follow me if they wished to see the crater that evening, as we did not know what weather we should have on the morrow. Six or seven besides myself started, and although I did not know the new path since the last eruption, fortune favoured us, and in spite of a strong and biting wind we were able to obtain a fine view of the crater and circle round more than half its circumference, which is probably more than a mile. It is now in a solfataric state, with nearly perpendicular walls and flat floor, probably some 100 to 200 metres beneath the rim. We descended opposite the Observatory, and had an amusing scramble over a very steep slope of hot, fuming, compacted dust.

Unfortunately, after a terrible night of piercing wind and driving cloud, the following morning rendered the ascent that was to be made under Prof. Silvestri's direction impossible, and some of the party had to descend disappointed. It is not the crater of Etna, however, that is the great centre of interest, but the innumerable things that one observes in the ascent and descent. After leaving the Piano del Lago on our way down, we quitted the clouds which were simply capping the mountain, and on our path to the Casa del Bosco, where we lunched, we often had bright sunshine. At the Observatory, thanks to the kindness of Prof. Silvestri, we had been most hospitably fed, and even at this point we had again to fall back on the abundant supply of provisions that he had provided for us.

Our next goal was the eruptive focus of 1886. We struck out of the main path for Mt. Gemellaro, a very large parasitic cone thrown up during that outburst. A considerable number of the bombs, containing partially fused quartz, thrown out on the flanks of the cone, were collected, and after photographing some peculiar lava formations, we continued our way down amidst a slight rain which rapidly increased, so that we had to hurry past the foot of Mte. Rossi without stopping to examine it. At Nicolosi we were met by carriages which conveyed us to Catania. The next day we took train to Messina, crossed to Reggio, and then went for twenty-four hours by train to Naples. The latter part of the journey, though undoubtedly fatiguing, was of great interest on account of the physiognomy of the country, from which many interesting lessons of

mountain and valley formation as well as of simple denudation could be learned.

On October 1st, the second group of the party, who had assembled in Naples, visited the National Museum, the churches of S. Chiara, Duomo, etc., Dr. A. Sambon, who especially occupies himself with mediæval art, acting as director, and in the evening they were joined at Parker's Hotel by the section from Sicily.

The following morning (Tuesday) a couple of hours were passed in examining the Zoological Station, its well-fitted laboratories and scientifically and artistically arranged aquaria, under the able guidance of the vice-director, Dr. Eisig, and MM. Linden and Megazini. We then proceeded in carriages to Camaldoli, where a magnificent view of the Campi Phlegræi is obtained. After lunch, the writer said he had brought them there to point out the general configuration of the country to be visited during the next fortnight. On the one hand was the Gulf of Naples, with its south-west side bounded by the Cretaceous and Jurassic Limestones of Capri and the Sorrentine peninsula, while at its deepest concavity rose in elegant, sweeping curves, broken by jagged precipices, the pile of Somma and Vesuvius. Then came the true Phlegræan Fields, including the amphitheatre of Naples, the ridge and Cape of Posilippo, Nisida, the hills of Mte. Dolce and Mte. Olibano, La Starza with Pozzuoli, Mte. Nuovo, the Lucrine lake, Baths of Nero, Baïæ, Bacoli, Mare Morte and Misenum on the mainland, but also the geological prolongations of the Islands of Procida, Vivara, and Ischia. The latter islands formed the south boundary of the Gulf of Gaëta, with Monte di Procida, Fusaro, Cuma, and then that long sweep of low ground of Castel Volturno, Mondragone broken only by the limestone bosses of Mte. Massico, until close to Gaëta, which is backed by the calcareous pile forming the north boundary of the gulf. The numerous cones and craters at our feet in all stages of ruin; the plains of Bagnoli, Soccava, Pianura, Quarto, in part due to old craters of explosion; later submarine bottoms when the waves lapped the foot of Mte. Barbaro and the base of the precipices we were then looking down from; the bright sun, the blue sea, and green foliage after the first autumn rains, combined, with the fantastic configuration of the country and its varicoloured rocks, to form a picture unique in itself and of

uncommon beauty. In fact, all the party admitted that they could hardly decide which impressed them most: the valuable geological lessons to be learnt from the district, or the beautiful outline and colouring of the landscape. Regaining our carriages we directed our course to the new quarter of Naples, now being constructed on the Vomero hill, where some good sections are exposed. The great mass of almost uniform yellow tuff cut into for some 25 metres is well seen overlaid by numerous comparatively recent, though pre-historic, trachytic pumice and dust beds, on which the writer expressed the opinion that they were derived from the craters of Astroni, Fondo di Ciglio, and the Fossa Lupara. He also pointed out nuclei of greener tuff passing into the characteristic yellow variety towards the surfaces of cracks and fissures, due to higher oxidation. The museum of San Martino was closed, but by the kindness of the Conservator, by order of the Minister of Public Instruction, a short round was permitted. From two of the balconies the topographical features of Naples, Somma-Vesuvius, and the Sorrentine peninsula were explained more fully than at Camaldoli.

That evening it had been intended that I should give a lecture on the geology of the Neapolitan district, and I had commenced to carry that determination into effect, but was prevented from continuing by an increase of ill-health that I had been battling with for a fortnight, and the following day I was compelled to remain in my bed. Fortunately, Prof. Bassani kindly replaced me, and under his care the party were conducted to the celebrated Grotta del Cane and the neighbouring thermo-mineral springs of the Lago d'Agnano, with the fumeroles of the Stufe di San Germano. From thence they proceeded to the Solfatara, where Prof. Bassani explained the phenomena of this semi-extinct volcano, how its emanations attack the trachytic tuffs, decomposing them into kaolin, free silica, alumina, and sulphates of the bases, which the party collected in the form of halotrichite, coquimbite, voltaïte, copiapite, gypsum, etc. Lastly, the party examined the renowned so-called Temple of Serapis, where the phenomena of oscillation of the land-level are fully demonstrated.

Sufficiently recovered from my indisposition, it again fell to my lot to grasp the guiding reins, so that on October 4th (Friday) the Campi Phlegreai was our goal.

Approaching Monte Barbaro from Pozzuoli, I drew the attention of the party to the irregular and ruined appearance of the south side of the mountain which extended round and had made so much progress as to leave a breach in the east side of the great crater, so separating, on this side, Monte Corvara, which constitutes the north side of the cone, and the crater of Campiglione, from Monte Barbaro which forms the south side. Towards the west the crater is also in part breached beneath S. Angelo, but not to such an extent; yet it is sufficient to mark the separation of Monte Corvara and of Monte Barbaro on the opposite side of the crater. It was by this former breach that we obtained admission to the great crater of Campiglione, the plain at the bottom of which is now covered by fields and gardens. This erosion of the front and sides of Monte Barbaro took place when the land-level was very much lower, so that the waves had in part destroyed this, the largest cone of the Campi Phlegreai. The deposits at the sea-bottom constitute the materials now forming the plains through which have risen, at a later date, the volcanoes visible from a point we had gained on the south-east limb of Mte. Corvara, namely: Astroni, Cigliano, Senga di Campania, Mte. Olibano, Solfatara, Mte. Nuovo, etc.

The old coast-line at the epoch when the waves lapped the base of Mte. Barbaro, and when the sea-level was some 60m. higher than at present, was as follows: Starting from the Island of Nisida it swept round the toe of the Posilippo ridge to Fuorigrotta, cutting back the cliffs behind Soccava, and beneath Camaldoli, thence to Pianura, and by a less distinct coast-line until we again meet a well-marked cliff which some distance to the west is traversed by a cutting for the road to Qualiano. The coast-line makes a sweeping loop to the south round three quarters of the Campiglione volcano, and probably including the upper rim of the Avernus and Lucrine Lakes. Monte di Procida, and a few other points of the Baja peninsula, were then islands, as well as such rocks as that on which Pozzuoli was built, Mte. Dolce, near Bagnoli, and probably Mte. Spina and some old trachyte and tuff bosses in part sheared by the eruption of Astroni on its east side. These latter eminences seem to have acted as breakwaters, and in consequence we find the old coast-line behind them more prominent and possessed of less abrupt declivities; that is that portion

from Pianura westward to a point just north of Segna di Campania.

After having examined the conformation of the Campiglione crater, we returned to the exit, near which was a quarry of the yellow tuff which composes the main mass of the cone. Numerous large fragments of grey pumice stone, quite fresh in the interior, but decomposed on the surface to a kind of palagonitic matter, illustrated how the whole of the smaller pieces and dust had undergone a similar change, blending the heap of incoherent fragments into one compact mass. This enormous collection of pumice indicated a gigantic explosive eruption which had not only built up the present cone, but probably had afforded much of the compact yellow tuff of the region, the position of which would indicate that the Campiglione volcano was later than the centre or centres from which was derived the grey piper-noid tuff of the Campanias, the piperno and the museum breccia of Pianura, Soccava and Naples.

The party then proceeded to Mte. Nuovo and ascended to the summit of the mountain, which was built up in the course of some forty hours by the constant ejection of pumice and other materials from an eruptive axis passing through the streets of Tripergola, a village with thermomineral baths on the seashore. The geologists might perceive that the main mass of the mountain was composed of a trachytic pumice, over which was spread a mantle of great masses of a dark, very basic trachyte (sometimes considered a phonolite), occasionally compact, but more often scoriaceous. This, I said, I considered to prove that while the magma in the upper part of the chimney was saturated with dissolved water, that lower down, and farther from aquiferous rocks, was less so, and had the eruption become permanent, no doubt lava would have poured out continuously. Many of those present collected fossiliferous concretions, which are similar to those found in the submarine marly tuff of Ischia, and in the submarine tuffs of the Starza which underlie Mte. Nuovo, and which are the deposits of the epoch of the erosion of Mte. Barbaro. Descending to some pozzuolana quarries, I pointed out that when we cut into the mountain for a few yards, we could see that the pumice and pozzuolana had already been converted into a yellow tuff much like that of Mte. Barbaro, although only 250 years had passed since its ejection as new material.

The crater lake of Avernus and the Lucrine lake were next visited, and the return journey included an examination of the Starza cliff, where a large collection of fossils was bagged. The following explanation was given: The materials here seen in section were derived from different sources, and in part by marine erosion of Mte. Barbaro, and were deposited at the sea-bottom when that erosion was progressing as described above. Immediately previous to the historic period, and after the rising of the land some 60m., a marine terrace was cut in these deposits with a cliff face from 10 to 100m. nearer the beach than at present. The Romans built along near the edge of this cliff, and on the foreshore at its foot (Temples of Serapis, Nymphs, and Neptune), and during this period depression was going on, the temples of the Nymphs and Neptune were probably abandoned, and a new and higher floor was added to that of Serapis. Up to the middle ages this depression continued, until the sea once more had covered the foreshore and cut back the Starza cliff to its present position, exposing and undermining the foundations of the Roman villas above. Part of these fell, were broken and rounded by the sea, and converted into pebbles. The exposed beach, with black sand, shells and brick and marble pebbles, was shown to the party, opposite the main gate to the Armstrong Works, at a height of 3·75m. above present mean sea-level.

In the evening the party paid a visit to my house to examine my private collection of rocks and minerals from the South Italian volcanoes, the former being by far the most extensive and choice either public or private, and the latter the finest private collection, or second only to that at the University, and therefore likely to prove of considerable interest to geologists visiting the neighbourhood.

The following day (Saturday, October 5) the party proceeded in carriages to the Vesuvian Observatory, and thence on foot to the Atrio. During the ascent the lavas of 1631, 1767, 1858, and 1872 were examined. The scoriaceous lava surface, with its bombs and the pahoe-hoe or corded type, with but few bombs, were pointed out, and explanations of the reasons of this were given. In the Atrio the dykes, lava-streams, and conglomerates were examined, and the condensation and agglomeration of the latter into a solid rock towards the lower part and centre of the great escarpment were shown to result

from heat and pressure. The newly-discovered hollow dykes and those that had been drained out and refilled a second, and even a third time, excited much interest.

The barren, rugged, and jagged lava-fields of the Atrio, the stupendous precipice, the frowning cone of Vesuvius, with its jets of stones and volumes of vapour, the latter mingling with the storm-clouds scudding through the ravines and around the towering peaks, strongly impressed those present with their grandeur.

With a basket or two of lapillo, a model was improvised to illustrate the causes of the configuration of this volcano at different periods of its growth. Some of the party descended by the Cupa Pallarino (once called the Riva di Quaglia), where the pumice beds of Somma are well seen, and where a good selection of the various ejected blocks can be collected.

The Sunday (October 6th) was occupied amongst the beauties of the National Museum, Dr. A. Sambon's demonstrations being very interesting and valuable.

Attention was drawn by myself to the various stones used in the arts there represented, as well as to the different minerals formed by the decomposition of the bronze antiquities. In the afternoon about half the members accompanied me to the tunnel of the Mte. Santo-Vomero funicular Railway in Naples, where the newly-discovered sections of interest are to be seen. A rich collection was made of rocks from the "museum" breccia as well as of the grey pipernoïd tuff. The details of this section have been described in the 'British Association Reports' (Vesuvian Committee) during the last three years. In the evening, boxes at the Bellini Theatre had been offered the party by the municipality of Naples, and a pleasant distraction from vulcanological work was found by the excursionists in Gluck's charming opera of "Orfeo."

On Monday (October 7th) the triple crater ring of the Fossa Lupara or Senga di Campana was visited, but the height and denseness of the vegetation prevented a good general view being obtained. Subsequently the sections of Pianura and Soccavo were examined. The problem of the "piperno" was broached by me somewhat in these words. Those of the party who had seen the tunnel section on the previous day would recognize its similarity to that before us. The massive yellow tuff, beneath which comes, in both cases, the "museum"

breccia, reposes, in its turn, at Naples on pipernoid tuff, and at Pianura on piperno, and these respective materials on white pumice beds. This showed that the grey pipernoid tuff and the piperno were stratigraphical equivalents. The former had all the characters of a tuff, the latter those of a lava, as indicated by flow-structure around the numerous fragments of greenish-yellow tuff, etc., caught up, by the overlying fragments of a more vitreous variety of the same, and by the presence of two (especially at Soccavo) distinct flows separated by a breccia of trachytic rock-fragments. Some authorities had supposed the piperno to be a metamorphosed tuff, but an examination of the section disproved that view, since the underlying pumice was unaltered, as also the trachytic breccia between the two flows of piperno. These facts lead us to the conclusion that not far from here, and probably a little to the south of Soccavo, at one time stood the great piperno volcano, subsequently destroyed by explosive eruptions and marine erosion, and that this was the centre from which was dispersed the grey tuff of Naples and of the whole Campania, which is of the same age. As regards the origin of the pipernoid structure, it could be explained by supposing the vent opening at the top of a fissure filled by the original magma, at the junction of two portions which contained different proportions of dissolved water and had undergone different stages of crystallization from cooling. The pasty magma would then issue with a laminated structure, just as different coloured clays or soaps do through a narrow aperture, the greater cohesion of the black, more vitreous, and less cooled portion causing the separation of the laminæ into larger pieces, which, with their peculiar, crushed, and squeezed-out surface, have remained in the lighter coloured, more granular, crystalline, less cohesive, and cooler ground-mass, which from containing more water tended to its disintegration to dust.

On Tuesday (October 8th) the train was taken to Pompeii, where Dr. A. Sambon acted as archæological director, and the beauty of the buried city being duly admired, the attention of the party was turned to the materials in which the town was buried. The pumice, with the more vitreous lower part, contains, as porphyritic inclusions, crystals, chiefly of intratelluric minerals; whilst the upper part, darker in colour and more microcrystalline, has inclusions of crystals of post-eruptive

minerals, and above these pumices come the pisolitic dust-beds. These are followed by very thin lapilli beds of later eruptions. The leucitic lavas on which the town stands, and the different rocks used in the arts by the ancient inhabitants, also attracted attention.

Signor Dini had kindly placed his steam-tug at the disposal of the party to visit the quarries of 1631 lava owned by him, which are the largest and best worked on the mountain. The rough sea and unfavourable weather prevented our availing ourselves of that kindness, and also of refreshments it had been the intention of the proprietor to offer us. After visiting Pompeii, we drove over to one of the smaller quarries of the 1631 lava, where the irregular columnar structure, shearing-planes, steam-caverns, and scoriaceous surface with bombs, could be well seen in section.

Early the next morning, being joined by Professor Bassani, we drove to the quarries of Faiano, near Nocera, where the grey pipernoid tuff is seen and quarried to 20 metres in depth. I explained that these tuffs are found all over the Campanian plain and a great part of the Terra di Lavoro, almost uniform in structure. Where they are in close vicinity to high limestone mountains they contain fragments of that rock, which are more or less, according to size, converted into silicates and fluorides, which was supposed to be due to the action of hydrofluosilicic acid, which probably formed one of the soluble constituents of the dust as it fell. What was of great interest was the fine crystals of biotite and nepheline, besides pyroxene and amphibole. Of not less important bearing on the temperature and pressure of metamorphism was a deer bone, which I lately found there, covered with amphibole and some nepheline crystals, but still retaining traces of animal matter. The age of this grey tuff is indicated by its stratigraphical position, which, taking distance into consideration, is similar to that of the grey pipernoid tuff of Naples and the piperno of Pianura. At Fiano and the neighbouring Fossa Lupara (not that north of Astroni) the grey tuff is overlaid by the Somma pumices representing the eruptions that excavated the Atrio del Cavallo crater (PHASE III TO VIII). In the great Atrio section, we have exposed the different mantles of volcanic ejectamenta, the lowest of which date back to the time when the entire cone of Somma could not have been as high as the present Vesuvius;

yet no traces of it are to be found, so that it must be more ancient.

Rejoining our carriages, we drove along the Sarno plain, at the foot of the limestone mountains to Castellamare, Professor Bassani pointing out the characters of the sedimentary rocks. After dinner, Professor Bassani gave a very able and interesting discourse on the orography of the Sorrentine peninsula and Capri, together with an account of the recent geological investigations of that district.

On the following morning (Thursday, October 10th), under the joint direction of Professor Bassani and myself, the sections exposed along the road from Castellamare to Sorrento were examined. We descended from the carriages at different points to visit the fine exposures of the Neocomian ichthyolitic limestones and the Orbitulina-marls (Aptien), ably guided by Professor Bassani.

Just before Vico Equense, we descended to the bathing establishment, where nearly at sea-level a very abundant spring of a very rich sulphur water issues, and the products of oxidation of its sulphur-compounds erode the limestone into fantastic caves, from the fissures of which abundant crusts and crystals of selenite, as well as some epsomite, can be collected. Close at hand I drew attention to a patch of the grey pipernoid tuff, with pieces of limestone partly converted into fluorides, etc. This tuff is seen reposing on some much older volcanic deposits, yellow earth and pumice collected in depressions in the limestone.

On our arrival at that point of the road which overlies the plain of Sorrento, I explained the structure as follows: the Sorrento peninsula represents an upthrow along a line of fault marked by its southern coast. Springing from this main fault, nearly at right angles, extend a number of transverse ones, and between two of these a depression is formed by a downthrow. This lower slope has been partly levelled by filling up with grey pipernoid tuff similar to that we saw at Nocera and Naples. This tuff is beautifully seen from our standpoint, forming a long line of cliff limiting the plateau seawards. These cliffs have a coarse columnar structure, which in other localities is often developed to great perfection, and the tuff near the contact with the limestone contains the usual inclusions.

The municipality of Naples had kindly placed a large steam-yacht, the "Sibilla," at our disposal, and on our arrival at Sorrento we were met by a deputation of representatives from the Naples municipality, consisting of Professors Majone and Roccatagliata, and Captain Vercilli, with whom we immediately embarked.

Within an hour we found ourselves at the Blue Grotto of Capri, which we were able to visit, owing to the calm sea.

On landing, our party, which was now over fifty in number, were divided amongst three hotels. After lunch, the prehistoric flint and obsidian implements, rocks, minerals, etc., of the island, carefully collected by Dr. Cerio, were exhibited by that gentleman, and the thanks of the party were offered to him with the expression of their admiration of his efforts to get together under many difficulties this valuable local collection. Later the party ascended to the Palace of Tiberius, and along the road Professor Bassani lucidly explained his own views, as well as those of Oppenheim and others, on the relationship of the Jurassic and Cretaceous rocks of Capri to those of the Sorrentine peninsula, and other parts of the mainland. From the ruins of the Palace of Tiberius the magnificent view at sundown, and the historic reminiscences called up by the locality, and ably recorded by the Rev. J. C. Fletcher, of Naples, deeply impressed everyone. After dinner, the party accepted coffee, etc., offered by the Mayor of Capri, and walked over to the Villa Tragara, the property of C. W. L. Ostermoor, Esq., of London, from which a magnificent moonlight view of the island was obtained, and where a pleasant hour was spent in admiring the scene, and consuming the liberal supply of refreshments provided by Mr. Ostermoor.

The next morning, October 11th, found us betimes on board the yacht, and a pleasant steam of two hours brought us to Casamicciola in the Island of Ischia. I had requested the captain to take the course outside Procida, so that those on board might admire the remarkably picturesque situation and surroundings of the town of Procida, and look into the partially submarine crater of Vivara Island. On landing at Casamicciola, the town authorities met us, and placed carriages at our disposal, with which we proceeded to visit some parts of the island. Monte Rotaro crater with the Monte Tabor lava-stream of mellilite trachyte, the craters of Montagnone, Porto d'Ischia,

the trachyte dome of Castello d'Ischia, and the bosses of ancient trachyte were pointed out. The road we followed lay for some distance over the olivine-trachyte lava-stream, the rough surface of which is still well seen, although at many parts small pine copses have been planted. Passing close to the irregular crater ring of Cremate, I pointed this out as the source from which this lava-stream, called the Arso, flowed in A.D. 1302 for a distance of two miles, when it entered the sea, forming a promontory. The Molara and another parasitic cone and crater were examined. At Testaccio, quitting our carriages, we descended to the beach of Maronti, but owing to the heat and the tiring walk on sand, the party did not reach the patch where the beach and sea-bottom attains a temperature of boiling water; nevertheless, some fine gorges in alluvial tuff, illustrating denudation, the formation of earth-pillars, etc., were examined. On the return of the party to Casamicciola, the remaining half-hour at our disposal was devoted to a drive round the earthquake ruins of the town. After a sumptuous dinner, at which over 50 people sat down, votes of thanks were offered to the municipalities of Naples, Capri, and Casamicciola, and their representatives. So high did the spirits of the company rise, that even ladies became eloquent and proposed toasts, which, though short, were no mean specimens of oratory.

A calm sea, a bright moon, and a soft evening, made our return trip to Naples such as is not to be forgotten. The deep indigo sea, and the trace of haze gave to the promontories, islands, and rocks a fantastic beauty, whilst the majestic, sweeping curves of Vesuvius, crowned by the jewel-like volcanic fires and vapour plume, reminded us that amidst all this beauty beneath and around us, the great igneous forces of nature were but in a recuperative slumber, a slumber the awakening from which will be earthquakes and eruptions.

The crater of Vesuvius, the principal focus of the volcanic activity of the Naples district, was the centre of the hopes and wishes of the party. I had placed it at the beginning of the programme, but for ten whole days either strong wind or cloud cap had prevented me from making the excursion. Over sixty visits to the Vesuvian crater had taught me to be cautious, but some members of the party, inexperienced of the locality and impatient to get there, openly rebelled and went on their own

account, of course failing to see anything more than mist. Saturday morning, 12th October, being more favourable, I gave the order for Vesuvius. Fortune favoured us in every way, and even a little cloud that had collected on the mountain top dispersed before our arrival. Four concentric crater-rings were visible, and at the bottom of the central one, two vents which all the party were able to approach within twenty yards, were giving issue to high-pressure vapour and pasty lava-fragments. Descending some 100 metres on the east side of the great cone, we were able to approach a small stream of lava, upon which various experiments were performed.

Sunday, October 13th, was a well-earned day of rest, and, although, owing to the loss of two days, the excursion to Monte Somma should have been undertaken, yet the majority of the party prayed for rest, and none desired it more than myself, still imperfectly recovered from my indisposition.

One or two of the youngest members of the party, however, had a successful trip to the locality. Neither on Monday could all the attractions of the Mineralogical Museum of the University, or the extensive knowledge of its contents of the venerable Professor, A. Scacchi, infuse sufficient stimulus in the flagging energy of the party. Packing the numerous spoils of the vulcanological chase required a considerable share of the morning.

Starting by the 3.25 express train, we arrived at Sparanise just before sundown, and were met by carriages placed at our disposal by the Province of Terra di Lavoro, to convey us to the town of Sessa Aurunca, where we arrived some time after dark. As the town possesses no hotel, the municipality had kindly allowed us to sleep in the Lyceum, the scholars being sent to their homes or friends' houses. The married couples were placed in different private houses. In the hall dedicated to the celebrated Nifo, a native of Sessa, a luxurious banquet was offered us by the town, most of the municipal authorities being present at the table.

The following morning (Tuesday, October 15th), after coffee offered by the municipality, we mounted in carriages, again provided by the province, personally represented by Prof. Spatuzzi. It was fortunately market day, and what the ordinary visitor, who follows the regular travellers' track, does not see, was a most interesting spectacle to our party. As we

wended our way up the vine and olive-clad slopes of the extinct volcanic pile of Roccamonfina, the yellow tuffs, then the leucotephrite and leucitite lavas and breccia beds, were of great interest. The peculiar decomposition of the former rock into a kind of concentric lamellar wacke, which often completely involved a stream, and made it look like a tuff, taught an important lesson to those who had studied ancient volcanic rocks. Near the entrance to the great crater-ring the explosive pumices and lapilli, near a great leucitite dyke composed of large leucite crystals in a fine-grained base, are well seen in the road-section. A little beyond, overlying all other deposits, we have the grey pipernoid tuff in columns that we had studied at Naples, Faiano, Vico and Sorrento. The town of Roccamonfina is the birth-place of the Com. N. Amore, the Mayor of Naples, who had done so much for us during our stay there, and he had determined that we should be equally well received in the town of his boyhood. On nearing Roccamonfina, we were met by the Mayor, Town Council, and the other notabilities of the place, including Com. Amore's brother. We had to descend from our carriages and enter the town in state procession, preceded by a town band, and amidst the shouts of welcome from all the inhabitants, who had turned out to see "gli scienziati Inglesi."

While lunch was being prepared, we ascended to the Pietritroccoli, one of the central eminences of the mountain. From this favourable position I made the following observations:—"You will notice the striking similarity in size and configuration of this volcano to that of Somma-Vesuvius. This similarity even extends to the leucitic rocks forming the main mass of the mountain. Some years since I spent some weeks in studying this volcano, but have never published the observations then made. Doctor Bucca and Signor P. Moderni, both of the Italian Geological Survey, have since then published short memoirs on the mountain. The researches of the former are chiefly petrographical, and his views quite correspond with my own; and Signor Moderni has added much to our knowledge of the sequence of the different eruptive products, especially the lavas, and I propose to supplement those researches by alluding to the information to be derived from my own observations.

"So far as we know, the volcano originally consisted of a gigantic cone, built up by the constant outpouring of lavas and

the ejection of scoria, lapillo, and dust. These materials were both characterized by the presence of leucite, and, according to the researches of Bucca and Moderni, the earlier outpours are of leucitite and the second of leucotephrite. My own observations lead me rather to consider them as intermitting with one another, and also to conclude that during the leucitite phase explosive eruptions occurred with the production of much white and grey pumice, pumiceous scoria, etc. As the great mountain grew, parasitic cones burst forth from its flanks, from which flowed the leucitic lavas, and Signor Moderni enumerates no less than a dozen such, still recognizable. The main volcanic cone having attained an altitude of from 2,000 to 2,500 m., one or more violent explosive eruptions truncated this cone down to less than 1,000 m. in height, leaving a large crater-cavity from five to seven kilometres in diameter. This or these explosive eruptions were around an axis a short distance to the east of the old one, upon which had been built up the old cone during long periods of Vesuvian activity. The products of this or these explosive eruptions we see in the numerous and extensive beds of white pumice and yellow tuff derived therefrom on some of the upper parts of the mountain, and especially around its toe. Around this new axis of eruption, exudation rather than eruption of an augite-andesite lava took place, building up a great triple dome or mammelon, on a portion of which we are now standing, and partly filling up the great crater-cavity. The annular fossa between this central cone was subsequently filled up level with the lower part of the great crater rim by fragmentary eruptive materials from other centres, and by erosion of the central cone and the inner crater walls. The latter are known at present as Monte La Frascara and Serra Piccola, or sometimes as Monte Cortinelli. You will recognize the analogy of this crescentic enceinte with the similar escarpment of Monte Somma, the circular plain on which the town of Roccamonfina is situated, with that of the Atrio del Cavallo and the Pedimentina, and, lastly, the compound cone of Monte S. Croce, Lattani, and Pietri-troccoli, on which we now stand, with the great cone of Vesuvius. Trachytes were poured out from thirteen lateral cones at an uncertain date, which Signor Moderni places just previous to, during, or after the production of the great central andesite mass. Then followed a period during which nine other parasitic cones gave forth basaltic

lavas, scoria, etc. Two of these latter had formed on the crater plain, constituting the hills of Tori Sichi and Garofali.

"At a still later date enormous quantities of a fine dust were deposited on the volcano from some distant source, which, when washed down, choked the valley by the resulting tuff, which often exhibits beautiful columnar structure, and if not identical with, bears a very close relationship to, the grey pipernoid tuff of the Campania."

Descending to the Town Hall, we found a plentiful lunch awaiting us, provided at the expense of the Commune, to which we did full justice after our long walk and climb. After taking coffee at the house of Cav. Amore, we again resumed our carriages, and drove down to Mignano. Although rain was now falling, we stopped at various points along the road, and at one spot made a good bag of large leucite crystals. At Mignano station we took the Roman express, it having been stopped for us by order of the Minister of Post and Telegraphs. We descended at the station of Cassino, and had over an hour's drive in torrents of rain to the top of Monte Cassino, where we were most cordially received by the prior, Dom Oderisio Piscicelli. One carriage had broken down on the way, and the occupants had had to tramp the rest on foot, one gentleman being only shod in thin slippers. A luxurious dinner, served in the great hall of the monastery, soon restored our drooping spirits and exhausted energies, and after a pleasant chat with the prior and other monks we retired to our comfortable cells, and slept a blessed, and, I hope, a saintly, though certainly profound sleep. The ladies had been quartered at the Foresteria, outside the monastery, and were equally well treated.

The next morning they were allowed to join us, and visit this remarkable centre of culture, with its valuable works of art, archives, antiquities, natural-history specimens, etc. The reproduction in lithography of the designs of ancient ecclesiastical robes and the printing and publishing of the contents of the innumerable manuscripts were all duly appreciated.

Lunch was served in another apartment, where ladies could be admitted, and the honours of the table were taken by the Rev. Prof. Laitine, a French monk specially delegated to receive strangers. After expressing our gratitude to the prior

and all the fathers of Monte Cassino, we commenced our descent on foot. Prof. Bassani, of Naples, who was to have directed, being unable to be present, had kindly handed me the following notes, which I communicated to the members :—

Monte Cassino is entirely composed of Cretaceous rocks containing *Hippurites*. The rock is a compact limestone, sometimes arenaceous, of a dirty white, dark yellow, or carnation colour. It is always traversed by veins of crystalline calcite, and often resembles that of Castellamare. The stratification is rarely clearly defined, but may be well seen at the commencement of the road from the town to the monastery. Three quarries occur in the neighbourhood, one just north and to the right of the station; another north of the town, and at the base of Monte Silvestro, beneath and to the north of Castello Manfredo (Rocca Jovina). The strata dip in the former 30° towards north, 40° west; and in the second, 42° towards north, 40° west. The third quarry is the most interesting, because one can easily collect specimens of *Hippurites* from it. It also exhibits a calcareous breccia. It is situated a few paces from the carriage road to the monastery, about twenty minutes' walk up.

A considerable number of specimens were collected, amongst which were some crystals of sulphur, which I discovered in a geode, its first known occurrence, I believe, in these Cretaceous rocks. Again joining the express train to Rome, we arrived at that city late in the evening, and took up our quarters in the Via Sistina, in the pension of Mrs. Dawes.

The following day (Saturday, October 19th) being wet, we visited the Museum of Geology and Mineralogy of the University, under the valuable guidance of Professors Strüver, Portis, Clerici, Tellini, Bucca, etc. The interesting series of minerals from the ejected blocks of the Lazial and Sabatine volcanoes, and the collection of decorative marbles and porphyrites used by the ancient Romans, were much admired.

Later in the day we examined the Museum of Geology and Agronomy at the "Istituto Geologico," in Via Susanna, under the able guidance of Cav. Ing. Zezi, the secretary to the Comitato Geologico (Geological Survey). The great variety of Carrara and other Italian marbles, the collection of building-stones and rocks, were duly admired. The interesting models of the Lipari Islands, Ischia, etc., were of great interest, and I

took this opportunity to draw the attention of those members who had lately visited the Aeolian Islands to their subaërial and also to their submarine conformation, pointing out how Stromboli is a very large and high volcano, half of it being submarine, and the origin of its Sciarra del Fuoco. Similar to Stromboli, Filicuri and Alicuri are seen to be composed of one or more semi-submarine cones, whilst Lipari is an exceedingly complex association of basic and acid volcanoes. The structure and physiognomy of Vulcano could be well studied on the raised model.

The next day (October 20th) being Sunday, the forenoon was devoted to St. John-in-Lateran and St. Peter's, and after lunch a number of other churches were visited.

On Monday, in carriages, we proceeded to the Capo di Bove, Signori Zezi and De Marchi acting as directors. In the quarries opened in the great lava-stream nearest to Rome, which flowed from the great Lazial volcano, some very fair specimens of nepheline were secured. The pozzuolana quarries, newly opened, close to the tomb of Cecilia Metella, were entered, and numerous good leucite crystals were collected. The Via Appia, the Catacombs of St. Calixtus, and the Circus of Maxentius were visited, in which latter the inner man was refreshed by a picnic lunch. In the afternoon the so-called pozzuolana quarries of the Tre Fontane were examined and a visit paid to the monastery and Eucalyptus plantations of the Certosa. On the return journey a stoppage was made at the magnificent church of St. Paul without the walls.

On Tuesday, October 22nd, we took the early train to Frascati, observing the peculiar facies of the Campagna Romana on our way. At Frascati, having provided the weaker of our party with donkeys, we made the ascent of Monte Tuscolo, Signor Zezi and Prof. Portis acting as directors. The rock, supposed by the local geologists to be a lava, but undoubtedly in most cases, according to my own views, an altered and compacted scoria, which is locally known as "sperrone," was seen to perfection. This rock has been very much used both by ancient and modern Romans as a building-stone, especially for posts, lintels, traves, etc. The ruins of Tusculum were finally reached, and lunch taken in the small theatre. Chestnuts were ripe, and we had filled our pockets with them: before lunch we made a fire of brushwood over them; and at the end of the meal

we had them ready roasted. From the summit of Tusculum Signor Zezi explained the configuration of the Alban Hills, and how the point on which we stood formed part of the rim of the great outer crater. The descent was made by way of Camaldoli and Monte Porzio, which latter is built on a parasitic cone, the form and structure of which can be easily studied.

Wednesday (October 23rd) was devoted to studying the rocks upon which the Eternal city is built, under the direction of Prof. Portis and Signor Clerici. At the Valle dell'Inferno, the directors drew attention to the fine section, in which three distinct beds were visible. The lowest, of bluish-grey sandy and fossiliferous clay, was the Pliocene marine clay; superposed on this we have the second stratum of yellow colour, composed of beds of sand which are also fossiliferous and of Pliocene age; and, lastly, the third or uppermost cap was of a darker yellow tint and consisted of materials of volcanic origin derived from the neighbouring volcanoes. Being specially permitted to enter the Farnesina, we descended to a brickyard, near which was a very fine section, similar to the last, and from which a rich selection of fossils was made. Here Sig. Clerici, who has devoted much time to the study of this formation, gave many interesting details.

On Thursday (October 24th), under the direction of Prof. Meli, we proceeded in train to Frascati, and from thence in carriages to Rocca di Papa, which is situated on the edge of the inner great crater-ring, often stopping to examine and collect. After an "al fresco" lunch, we ascended on foot to Monte Cavo, much of the way being over the polygonally paved road, made by the Romans, still in splendid repair. The constant occurrence of V. N. (Via Numinis) referred to the temple to Jupiter Latium which once occupied the summit, the centre of the annual pilgrimages of the Latin races who camped in the subjacent crater-plain. Monte Cavo is a small cone thrown up on the edge of the inner crater-ring which encloses the crater-plain just mentioned, which is known as "Campo di Annibale," although Hannibal never encamped here. Prof. Meli referred to a passage in Livy, which mentioned the occurrence of a rain of stones on the Alban Hills, supposed to be due to some eruption close by. The descent was made by way of the Madonna del Tufo, to Albano, where we passed the night at the Hotel de l'Europe. At dinner Mr.

T. V. Holmes, F.G.S., the President of our Association, said that he regretted having to leave us on the following day, and took that opportunity, in the name of the Geologists' Association and Geological Society of London, to thank Dr. Johnston-Lavis, and also Mr. L. Sambon, who had done so much to make this scientific excursion a success. He had greatly enjoyed his visit to that beautiful country, of which he would carry away an indelible remembrance. He drank to the prosperity of Italy; and as her volcanic fires were not yet spent, so he hoped that neither were those gifts which once had rendered her the first nation of the world. Profs. Meli and Portis, as also Mr. L. Sambon and myself, replied.

Early the next morning (Friday, October 25th) we took carriages to Genzano, and thence on foot made the whole tour of the beautiful Lake of Nemi. The party had the valuable services of Profs. Meli and Portis, to whom were added Signori Zezi and Tellini. The character of this crater-lake was explained, as well as that of Valle Ariccia, of which we had obtained a fine view. The latter has been filled up to its lowest edge by alluvium brought down from the hills above. Many interesting specimens were collected, including many varieties of peperino. After lunch at Albano we mounted to the edge of the Albano crater-cavity, which contains a much larger crater-lake than Nemi. Numerous ejected blocks, with haüyne and other minerals of contact metamorphism were obtained. The edge of the crater was followed to beyond Castelgandolfo. Just beyond this town Prof. Meli pointed out the vegetable impressions on the under-surface of the peperino which indicated its mud-like character when ejected. Descending to Marino, the numerous and extensive peperino quarries were visited, and our bags having reached the limit of what they could contain, pockets, greatcoats, baskets, and even ladies' mantles were converted into receptacles for the numerous heavy but interesting examples of rocks and minerals, with which we returned to Rome by the evening train.

Saturday (October 26th) saw us, with Signor De Marchi at our head, taking the train to Montecelio, near which, at Collelargo, are the quarries of Messrs. Maggiorani, worked in the Liassic limestone. In one quarry we found the old Pliocene shore-line, in which the limestone is bored by *Lithodomus* and *Clionia*, and presents other similar indications. Here we lunched,

being supplied with refreshments by the proprietor, to whom a vote of thanks was accorded. Returning we examined the bathing establishment of the "Acqua Albule." This spring, which forms a small river, sufficient to be utilized for mechanical power, is very rich in carbon-dioxide and hydrogen-sulphide. The former and the oxidation-products of the latter produce very remarkable effects upon the solution and deposition of lime in the form of travertine. Next we were conducted in a special train, provided by Count Guiseppe Savorgnan di Brazza, to his quarries of travertine, where we were joined by Signor Lanciani, the Professor of Archæology in the University of Rome, who kindly gave us much valuable information of an antiquarian nature, from which we could glean the following: These were the ancient Roman quarries, from which the stone of the Colliseum, Basilica Julia, Castle of St. Angelo, and numerous other buildings was derived. They had but lately been reopened, and we were able to see a talus of travertine that had formed against the old quarry-face since Roman times. The area that had been denuded by the ancient workers was very great, as also were the mounds, or more properly hills, of *débris*. Even tombs of the ancient quarry masters had been met with. The method of cutting out and splitting off blocks of this rock, one of which was 40 c.m. in volume, was seen going on, and Mr. G. W. Butler, B.A., obtained some photographs of it. After Count S. di Brazza had liberally supplied us with tea, sandwiches and champagne to sustain us during our return journey, we entered our special carriages, which at Bagni were attached to the train to Rome.

After dinner the members of the excursion assembled in the salon of the hotel, where I gave the discourse which I had, on account of ill-health, been unable to do at Naples. The general arrangement of the Italian volcanoes and their geological age were referred to. The only rational theory that explains all the phenomena of eruption was in a few words described, and the different regions we had visited were recalled as illustrations of the theory.

Sunday, October 27th, was again given to the churches and antiquities of Rome.

On Monday, October 28th, in steam-tram, we took the road to Tivoli with Prof. Portis, Sig. Zezi and De Marchi as our leaders. We were met at Tivoli by Cav. Tomei, and taking

the ladies in his carriage he conducted us to the sights of the town. The beautiful Villa Gregoriana, the cascades, both natural and artificial, the Mesozoic limestones, and, above all, the formation, in some cases rapidly progressing, of calcareous tuff and travertine in and near the caves of Neptune and the Siren. After partaking of lunch, the different works that utilize the water-power were inspected, and on our return journey we drove through a new subterranean viaduct lit up by incandescent lamps, worked from the electric illumination station.

In the evening the members of the party issued an invitation to the directors of the different excursions, including Profs. Lanciani, Meli, Portis, Count G. Savorgnan di Brazza, Cavalicri De Marchi, Zezi, etc.

Dr. Drew, who had presided after Mr. Holmes's departure, said, in recalling the numerous and deeply interesting excursions that they had made, he could not forget the provinces and municipalities that had offered us hospitality, thus showing sympathy to us Englishmen and interest in science; still less could he forget the professors and friends who had directed and aided them in their excursion, and he wished especially to express his thanks to Dr. Johnston-Lavis and Mr. L. Sambon, who, with their wide information, their knowledge of the localities and their love for science, had known how to overcome the obstacles and carry into execution the programme that had been proposed. He was not only grateful to Dr. Johnston-Lavis for having promoted such an important series of excursions, but also for having added so much to the advancement of vulcanological science by so many years of disinterested study, with so much intelligence and so much enthusiasm.

Before finishing his speech, he felt it his duty to combat two false and preconceived ideas of English people regarding South Italy, viz., the laziness of the people and the insalubrity of the towns. Wherever he saw man, woman, or even children, they were working with great activity, and were working for little or nothing. Then at Naples and elsewhere, all had been to visit the magnificent Sanitation works, and he recalled the interesting discourses of Prof. Spatuzzi, Signor Sambon, and Dr. Johnston-Lavis, who had shown with statistical data how Naples was far healthier than many well-known European cities and that it had made an enormous stride in the last two or three years,

which brought it up to the level of sanitation which modern civilization requires. He, therefore, could not do better than wish Italy a future as glorious as her past.

Dr. Johnston-Lavis, in reply, said that he could only express his deepest thanks for the flattering remarks referring to himself and Mr. L. Sambon. He felt it an honour to have been useful to such a large body of scientific men and women.

Mr. L. Sambon said he was sure he should be interpreting the sentiments of all in expressing their gratitude to Comm. P. Boselli, the Minister of Public Instruction, who, patronizing this journey through Italy on the anniversary of the celebrated voyage of the great Spallanzani, had shown how much interest he took in science and the renown of the country.

Count G. T. di Brazza drank to the harmony of science, art, and industry, and to the friends of his country.

Prof. Lanciani drank to the health of Old England, calling her the modern Rome, for her greatness was in her colonies, as was that of ancient Rome.

Signor Ingre. Demarchi drank to the lady members of the party, who proved how strong the weak sex were in England.

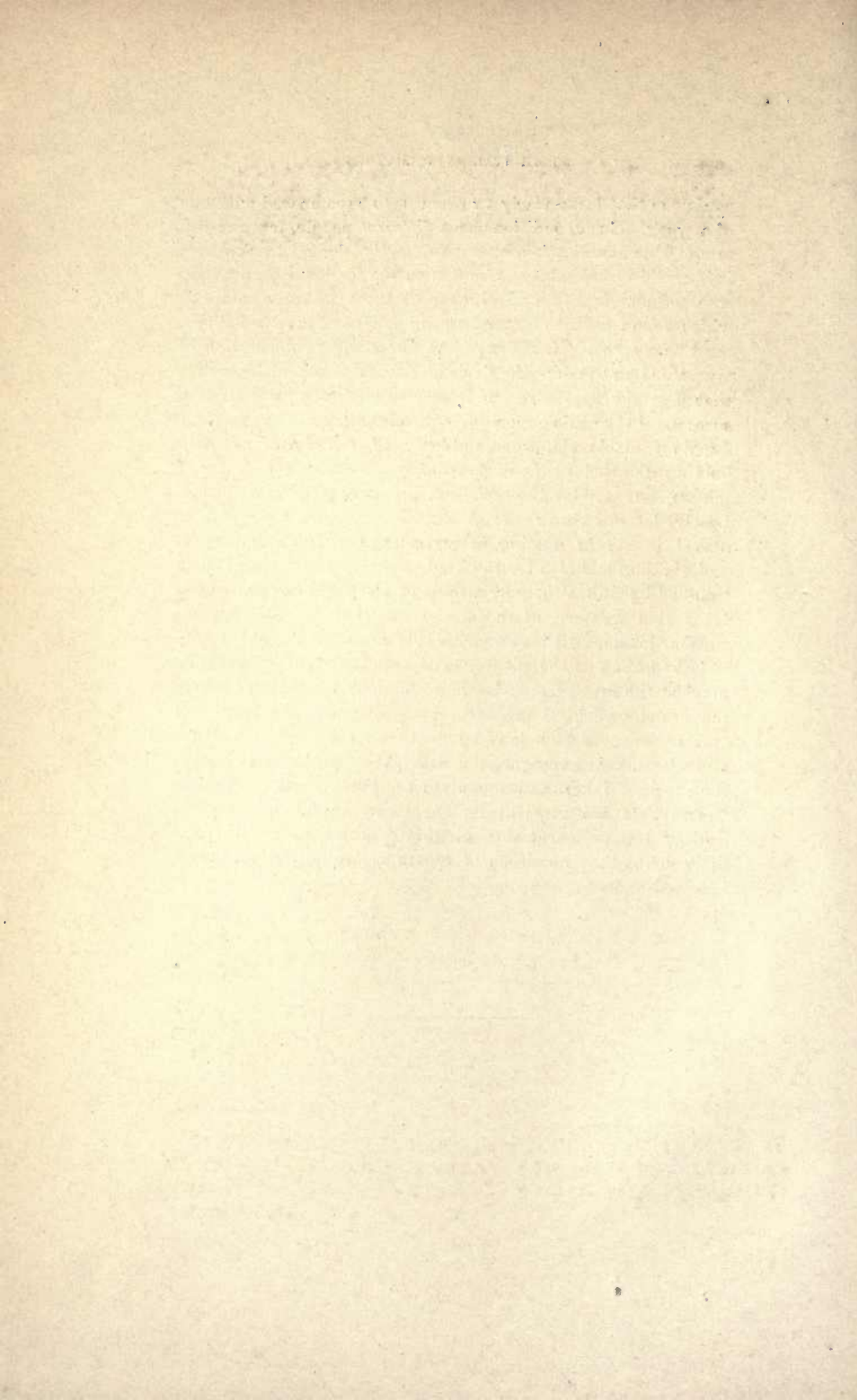
Mr. G. Potter said that as one of the three founders of the Geologists' Association, he was glad to see that on its 30th anniversary he should have been able to take part in the greatest and most successful enterprise yet undertaken by it, and he, therefore, in the name of that Association drank to the health of Dr. Johnston-Lavis, to Mr. L. Sambon, and to the professors of Catania, Naples and Rome, who had directed the various excursions.

The following day the party broke up, but a considerable number remained to see the sights of Rome.

In bringing this report of our excursion to a termination, I must first ask your pardon for the imperfections in the style and details of the account, which have been due to the very limited spare time at my disposal. In a considerable number of places it has been necessary for me to speak of myself, but although I should have wished to do otherwise, it would have rendered the account so disjointed as to have made it unsatisfactory.

Altogether, it may be said that the journey was made without any serious hitches, and even where some discomfort and displeasure were caused there was ample justification for them. A journey in Italy is not the same as one in England.

nor is one that lasts nearly two months to be compared with one of a week. Such conditions as a different people, few and bad means of communication, absence of hotels, along a track where it is considered the duty to impose on the foreigner, besides the want of punctuality and absence of those business habits on which so much depends, renders the burden of responsibility a most heavy one. Had I not had the kindest co-operation of my valued and many-gifted friend, Mr. L. Sambon, I am sure that I could not have made the excursion approach to a success. I take this opportunity in offering my deep gratitude for his valuable aid, when suddenly I found myself not only holding the helm of responsibility in the vast ocean of science, but amidst the reefs and breakers of administration. Lastly, let me thank the Association for the confidence it placed in me in putting in my charge such an important undertaking, and also for the kind tolerance towards me, when troubled by ill-health, worry, want of sleep and repose and unfavourable weather, of those who took part in it. In conclusion, let me wish success to this Association, which may be looked upon as the pioneer of its kind, and hope that this may be the first of a series of excursions to localities where the grand geological processes and phenomena are easy of access. Amongst such may be mentioned the volcanic districts of Iceland, the Auvergne, the Eiffel, the Tyrol and Hungary, the glaciers, lakes, and mountain sculpture of the Alps and Norway. I am grateful for the many valuable lessons in geology I have learnt through this Association, and there is little doubt that hundreds of others are equally or still more indebted to it.





CHAPTER II.

GEOLOGICAL NOTES OF ACIREALE

by

SIGNOR GAETANO PLATANIA

MEMBER OF THE GEOLOGIST'S ASSOCIATION, etc.

Acireale is certainly one of the best head-quarters for a naturalist, especially those who wish to visit Etna. It is celebrated for the richness and variety of forms presented by the marine fauna and flora of its shores, particularly that stretch of the Sicilian coast from S^{ta} Tecla to Acicastello. Neither is it less endowed in its extramarine fauna and flora, which assume in its neighbourhood a richness and quite a special facies. Acireale possesses a splendid climate which, coupled with every modern comfort, renders it preferable to any other centre for those who wish to study the natural history of Etna.

Much greater, however, is the importance of this city for the vulcanologist or mineralogist. In fact from Acireale the ascension to the localities of the most celebrated eruptions is as easy as from Catania, whilst trips to the Valle del Bove are much easier, as well as to the sites of the interesting and characteristic eruptions of 1852, 1865, and 1879. The neighbourhood of Acireale, with the tuffs, basalts and numerous and varied lavas are the most interesting points for the study of Etna.

In these notes of mine I propose to rapidly pass in review

the most important of these deposits, which makes Acireale a very rich, almost virgin and unexplored field for study.

The town stands about 170 m. above sea-level and is situated on a steep eminence called Timpa and composed of numerous sheets of lava and beds of tuff. A plain extends northwards, in part covered by the current of 1329 which reached the sea. Along the coast different mineral-water springs gush out, many of which have not yet been analysed. At Puzzillo is a spring of ferruginous water which is much used in Acireale, there is a magnesian one, and another at Stazzo also probably magnesian, whilst a saline one gushes forth from the volcanic rocks at Sta Tecla at 30 m. from the sea.

Beneath this lava stream of Sta Tecla a curious and rare object was found which is presevered in my own collection. It consists of a piece of wood, possibly the stem of a vine, which being enveloped in the flowing lava was carbonized and cracked in such a way that the magma from its great fluidity has penetrated the cracks, making a detailed cast of the wood which has now completely disappeared ¹

Nearer to Acireale, at that part N. of the Balzo at the Timpa di Mortara, may be observed a curious prehistoric lava which has undergone decomposition into spheroids, so as to appear as being composed of so many volcanic bombs, piled one above another, and consequently compressed and crushed. Pieces of this lava scale off in concentric shells, more and more rounded, until a less decomposed nucleus is reached.

Under this interesting eminence, just to the E. near Sta Tecla and but a few centimetres beneath the surface, has been discovered an ancient lacustrine basin containing a great number of fresh-water diatoms. Curiously amongst these occurs the *Eunotia gracilis* sm. (= *Himantidium gracile*. Ehrb.) which so far has been found in lakes of great altitude above sea-level.

The N. part of the eminence of the Timpa of S.^{ta} Tecla is constituted of thick beds of tuff intersected by some horizontal sheets of lava. I have not, so far, collected any plant remains in this tuff such as are found in so many other tuffs of Etna, and even in the neighbourhood of Acireale, but it is very probable that they

¹ Signor Gaetano Raciti has discovered in the lava of Fossa dell'Acqua, W. of Acireale, other less striking examples which present the same phenomenon. These he has very kindly given me, and are preserved in my collection.

exist. Near the town a prehistoric lava has been precipitated from the Balzo forming an enormous lava cascade, the surface of which is now capable of cultivation, and on which stands the Villa Belvedere. Amidst the scoria of this stream are to be found good crystals of Specular Haematite and vermicular silica, just as is the case in the middle of the town in the lava on which is built the Piazza del Duomo.

On the shore under the great cascade of lava is the celebrate Grotta delle Palumbe (Pl. XIII) excavated in a lava of earlier date and which presents a splendid prismatic structure. This Grotta delle Palumbe, which has been compared to Fingal's Cave in Staffa, although damaged by the fury of the waves, is still beautiful to see, with its walls rising straight up from the water and composed of radiating prismatic lava, whilst the bold and fantastic reefs which surround it form a most admirable passage.

Beyond the great lava cascade, the eminence (Timpa della Scala) is composed of numerous parallel beds of lava of different thickness, varying from 2 to 10 m. which dipping to the S. disappear beneath the sea. These old lava streams alternate with beds of red pozzolana. In the lower lava flows beautiful radiated Aragonites can be collected, white, pink, red-brown and green spheroids of the same mineral, together with Sphaerosiderite, Vivianite, Mesotype, Opal and Chalcedony. In one lava stream of considerable thickness near a bed of white tuff, in which vegetable impressions have been met with, are to be found beautiful examples of Olivine of a centimetre or more in size.

One fact worthy of notice is the state in which the large crystals of Hornblende occur in the lower lava beds. These crystals are sometimes cracked and the fissures have been penetrated by the magma as in those beautiful examples from Milo; sometimes the process is so advanced as to have reduced the crystals to fragments, more or less numerous, which are cemented together by the magma so as to assume an irregular polyhedral form. Around these crystals there often occurs a vacant space so that they can be easily detached from the matrix. ¹

¹ It is of very common occurrence for a rough irregular solid body enclosed in lava to be surrounded by a cavity. The cause of it is undoubtedly the presence of a large free surface at which the evolution of H₂O and other gases in solution take place with ease and freedom, as illustrated by a crumb of bread in a glass of champagne.

Following the coast one meets with springs of ferruginous water very rich in iron ; which flow out from the rocks about 1 m. above sea level under the Timpa di Sta. Caterina, at a point almost inaccessible from the land side. A little farther on is the Timpa di Tamàso, celebrated for the aerolite which was seen to fall there. Gradually the cliff diminishes in height as Capo Molini is approached, upon which rises the ancient and renowned tower called Sta. Anna, and near which was wrecked the British Eclipse Expedition of 1870.

Leaving behind the smiling coast, which according to legend was the site of the amours of Aci and Galatea, the furious jealousies of Polyphemos, and passing the Capo Molini we soon reach the Port of Ulysses so celebrated by the Homeric poems, as also the seven reefs and islands which the enraged Polyphemus was supposed to have hurled at the daring Ulysses. The largest of these reefs, is the island of Lachea; it is composed of columnar basalt, dolerite and a metamorphosed clay to which Gemmellaro gave the name of Cyclopite. This island is renowned for the large and beautiful crystals of Analcime, which can be collected there in great abundance, and which in consequence of their very limpid nature and such fine water have been utilized as gems. The Analcime is also found as salbands to the dykes of dolerite which traverse the clay, and as a crystalline crust on the latter where in contact with the dolerite. The same mineral is found sometimes in such extreme abundance as at the Faraglione Grande as have given the name of Analcimite to the Dolerite which was filled with it and which in consequence becomes a remarkably hard rock.

In the island of Lachea and in the other Cyclopean reefs are to be found many other minerals, as for example Pyrrhotite in crystals, Pyrites, Chalcopyrite, Hæmatite (specular), fine scalenohedra of Calcite, granular Magnetite, rhombohedra of Dolomite, Siderite, Arragonite, Pyroxene with the variety Diopside associated with Anorthite, fibrous Tremolite of white, green and red colour, and Anorthite var. Cicoplite in flat tables (a mineral and not a rock), etc.¹

On the eastern side of the island of Lachea are to be observed, at different heights above the sea level, bands of rocks covered by serpulæ and bored by lithodomi, which proves the re-

¹ I have also met with good crystals of Thompsonite.

cent elevation of this reef, just as that observed at Palmarola by Dr. Johnston Lavis.¹

The studies of Hamilton, Dolomieu, Spallanzani, Gemmellaro, Lyell and in fact almost everyone who has visited Etna, have advanced many theories to explain the formation of these rocks and have not yet exhausted the vast field of research which they offer to the naturalist, researches which render these reefs, already celebrated for the part they play in mythology, a sacred monument for the history of science.

The landing at Acicastello is beneath a cliff of beautiful globular basalt, (Pl. XII) which, like the neighbouring reefs, has also been studied by so many renowned geologists, is also rich in different minerals, and its peculiar structure has given rise to so many theories and hypotheses. Upon this cliff stands the historic ruins of the castle of Aci, glorious ruins that merit more care and preservation, and from whose walls one may enjoy a splendid panorama. By the side of the globular basalt projects a remnant of pelagonite tuff rich in beautiful zeolites. Amongst the most important minerals found in this tuff and in the basalt, the following may be mentioned, Chabasite in rhombohedrons, Garnet, Herschelite, crystallized and globular, Phillipsite, and finally Mesotype which some mineralogists believe to be a mixture of Natrolite and Scolecite, an opinion not accepted by Von Lassaulx.

Leaving the coast we first notice a deposit of clay which extends northwards as far as Capo Molini, westwards to Nizzeti, and which southwards is limited by a recent lava that has surrounded different basaltic hills and even the rock of Aci-castello. This Post-pliocene clay (according to Lyell, earlier according to Gemmellaro) contains little bands of Augite. From the midst of this clay rises numerous basaltic hills, one more interesting than the other, and which present such variety of structure, such mineral riches as to offer a vast field for the study of the Vulcanologist.

Without occupying myself with the beautiful prismatic basalts, sometimes extremely well preserved and at others more or less altered and crumbling; nor stopping to describe the fan shaped sections of the radiated basalts, which form splendid natural rock walls, I will devote a few words to the globular basalts of Acicastello and of these hills. These globular basalts may be divided into two categories, namely: 1st - the comparatively large, divided into

¹ H. J. J. L. — The Ponza Islands. — *Geol. Mag.* 1889, pp. 529-535.

prismatic wedges, radiating from the centre and sometimes articulated, 2½-in globular basalts with a concentric cleavage, of most variable dimensions, which sometimes enclose foreign rocks. Both are commonly found near metamorphosed tuff-beds and those nearest to these tuffs present a thin vitreous cracked crust. The basaltic globes are often slightly deformed in consequence of the reciprocal pressure of one against another when they were yet in a pasty state. This, however, does not prevent the general existence of variously sized interspaces between them which is occupied by clay and tuff. Of particular interest are little globes of about a centimetre in diameter which consist externally of a vitreous crust, internally of basalt magma with crystals of Olivine, Pyroxene and Felspar.

All the basalts of Aci-Trezza and Aci-Castello are probably due to the injection of magma into a thick stratum of submarine silt, which occupies, as has already been said, the interspaces between the different globes. The globular structure is probably due to the phenomenon observed experimentally by Dr. Johnston Lavis that injecting into a dense viscous liquid (in this case the submarine silt) another dense liquid (basalt magma) this latter assumes the form of spheres with a narrow neck which may be divided leaving the spheres detached. Each globe has a different surface of cooling which with the consequent contraction extends from without inwards and divides the globe into a number of radiating wedges. ¹

The globes at their periphery in which the cooling was most rapid are vitrified at the surface, being covered by a glassy crust, the formation of which was aided by chemical reaction between the basalt magma and the clay with which the former was in contact. ²

The concentric cleavage which is often exhibited by the globular basalts is quite distinct from that produced by the decon-

¹ By using a coloured syrup and injecting into a liquid one, the coloured material spreads out in a cauliflower fashion but the whole mass looks like so many globes. A careful examination of globular basalts shows that many are not simple globes but rather pear shaped masses with a narrow neck which is often absent having been divided while still fluid. I have lately seen many beautiful examples illustrating this mode of production in my rambles in Iceland; parts of Cape Reykjanes serves as a good example. Ed.

² The author probably refers here to the pelagonitized layer covering the globes? Ed.

position due to meteoric agencies, as in the lava of the Balzo to the N. of Acireale. In this case the blocks of lava are irregular prisms of lava which shelling and cleaving, little by little, assume a spherical form until by cracking them one encounters a less decomposed nucleus.

In the true globular basalts the globes are preexistent to the action of meteoric agents, and independent of the latter, and the concentric cleavage also depends on the process of cooling, the radiating wedges, dividing into a number of joints, so that the the crusts, which in consequence of the columnar cleavage, separate into fragments which are generally prismatic, and simply represent the flattened jointed structure of straight basalt columns. No doubt at the same time meteoric agencies have aided in rendering the concentric shelling more evident.

Leaving the basalt hills and proceeding still farther from the coast to near Aci S. Filippo the clay beds, covered with numerous and enormous angular blocks of lava, is circumscribed by a step-like elevation formed of different recent lava streams. Upon it are situated smiling villages, elegant villas, and below at the contact of the lava and the clay numerous limpid springs gush forth.

Near Reitana fossil remains of elephants have been found by others, and I have collected some myself in a new tunnel now in construction. In this locality, at about 1 m. from the surface of the ground, occurs an interesting stratum of white pumice, much altered and already become friable. It has been said and repeated several times that no true pumice was to be found at Etna and it is in consequence of this that Prof. Basile maintains that this comes from the Lipari Islands; floated here on the sea. ¹ A microscopic analysis and careful study of its mode of occurrence is likely to settle the question of its true origin ². These pumices extend under the lava as far as Sta. Venera where there gushes forth the celebrated springs of sulphur water (Sulphuro-saline-iodo-lithia-manganesiferous-hydrocarbonated) ³ It is mainly to these waters that Acireale owes its great importance as a first class climatic station for the treatment of disease. The Ro-

¹ G. Basile. — L'Elefante fossile nel terreno vulcanico dell'Etna. — Atti. d. Accad. Gioenia. Ser. III, Vol. XI.

² Either the Val di Bove is not a crater of explosion or true pumice that must have been then ejected should be found at Etna. Ed.

³ Silvestri O. — Sulle sorgenti idrogassose di S. Venera al Pozzo. — Catania, 1873.

mans built sumptuous *Thermae* near these springs, the ruins of which still resist the assaults of time. All around in this charming country, in different excavations have been found mosaics, statues, vases, coins, and other remains, which it is sad to see so much neglected by the Government and the Municipality of Acireale. This is still more the case, since the celebrated polemic concerning the origin of Xiphonia and Acireale would have in them so many precious documents to help in solving the question. Much praise is however due to the efforts of the *Accademia delle Scienze* of Acireale, which in the picture gallery possessed by it, proposes to incorporate an archeological museum combined with the little collection of natural history which also belongs to that body and which is being gradually increased.





CHAPTER III.

A SHORT AND CONCISE ACCOUNT OF THE GEOLOGY OF VESUVIUS AND MONTE SOMMA

BY

H. J. JOHNSTON-LAVIS

M.D., B. ès Sc., F.G.S., etc.

INTRODUCTION

Vesuvius during the last eighteen centuries has been looked upon as the type volcano and although from time to time rival claims have been advanced, this fire-vent of the Campanian Plain still maintains its supremacy. That this is the case doubtless is due to a combination of favourable circumstances. In the first place its situation within easy reach of one of the largest of the towns and seaports of the Mediterranean so that there is no part of the mountain that cannot be visited in one day's excursion out and back from Naples. The peculiar asymmetry in its shape, which, while striking to the eye as curious, is yet sufficiently simple to be readily comprehended. Its beautiful lavas, pumices, escarpments and numerous and varied dykes as well as its extraordinarily extensive and unique series of ejected blocks with their mineral contents, make the locality one of profound interest alike to the mineralogist and to the physical

geologist. Then again its continuous activity has fascinated the chemist and lead him to investigate its gaseous emanations and sublimates with as much enthusiasm as his scientific colleagues. Mineralogists, and perhaps still more geologists, are keen connoisseurs of beautiful scenery and have been seduced by the charms of the locality to devote more attention to the most important element in the beautiful land and seascapes of the Gulf of Naples. Last but not least, there are the innumerable associations with history and even romance, upon whose many many pages the classic name of Vesuvius is engraved; a name known to almost every school boy or girl in the civilized world. Its great rival Etna, many times its size, possesses neither the bold slopes, fine precipices, or beautiful situation of Vesuvius, whilst the products of the Sicilian volcano are but little varied and monotonous in the extreme. Still less can solitary, little varying Stromboli or its equally isolated though more interesting sister Vulcano, aspire to the enviable position of type volcano that Vesuvius with its majestic and elegant proportions is likely to continue to hold. It was on this ground that I undertook to prepare a geological map of the mountain on a very large scale which is now just published.

GENERAL DESCRIPTION

ERA A. — The Campanian Plain including what is now known as the Terra di Lavoro formed in Pliocene times a great gulf (at present represented by those of Naples and Gaeta) near the northern end of which rose the limestone island of Monte Massico and a few other detached masses and which extended in the form of narrow inlets amidst the calcareous Appennines, at the base of whose cliffs the waves of the Tertiary sea expended their fury whilst sands and clays were brought down by the rivers and deposited on the neighbouring sea bottom. Towards the end? of the Pliocene period, numerous volcanic outbursts took place in the neighbourhood of Naples. Whether the vent, around which Somma and Vesuvius were eventually piled, appeared before the first openings of the so-called Phlegroean Fields is as yet undecided and is not unlikely to remain so. Probably coincident with the earlier volcanic manifestations of the period, the shallow pliocene sea-bottom was raised to somewhere *near* its present level and now forms the fertile plains of the Campania Felice.

What were the characters of the phenomena or of the pro-

ducts of Somma-Vesuvius when first it arose we can only judge of by analogy. We may therefore suppose that the first materials ejected were pumices, which were followed either immediately or at a somewhat later period by lavas. Amongst the ejected blocks of Monte Somma, Basalts, Trachytes and other rocks are met with that are not now seen *in situ* there. This fact leads to one of two conclusion, either that amongst the earlier products of this focus these rocks occur, or that previous to, if not during, the earlier existence of Somma-Vesuvius, such products had been spread over the area from neighbouring vents. Leucite which is the dominant and characteristic silicate of the lavas, etc. of this volcano in its more recent stages, may, have likewise characterised the earlier products, should the above mentioned rocks not be derived from this vent.

The plain which surrounds Somma-Vesuvius must be relatively much higher than when the volcano first manifested itself, for whilst the mountain grew up over 2000 m. (or 7000 ft.) the surrounding district must also, in the absence of rivers, have been raised by the addition of loose materials transported to it through the air, or by water as well as by lava streams some of which flowed great distances over it. Sections in fact confirm this and demonstrate that considerable additions were also being made by the ejecta from the neighbouring volcanic vents. Now the height of the Campanian Plain around the base of the mountain is not very much above the present sea level and we have also evidence that not long prior to the historic period the sea level stood relatively much higher than at present, as indicated by the Starza and Castellamare marine terraces. All these facts indicate that Vesuvius was originally an insular volcano. The most striking proof that it has, in times past, been much more than at present surrounded by comparatively deep sea is the artesian boring at Ponticelli where I found leucitic lavas, scoria pumiceous scoria to occur to a depth of 177.25 m. (or 591 ft). These lavas were traversed from 59.90 m. (or 200 ft) to 105.44 m, (or 351 ft). from the surface or 80.44 m. (or 268 ft) from the present sea level and if they really belong to Somma-Vesuvius a considerable inlet of the sea must have extended to near Pomigliano D'Arco sufficiently deep for the lavas to flow into. In well-borings at various localities around the foot of the mountain confirmatory evidence of this kind has been met with; in fact, Breislak a century since arrived at a like conclusion based on the latter evidence only.

Whether the leucitic pumices, pumiceous scorias and scorias

met with in the boring at Ponticelli belong to the initiatory stage of the volcano it is very difficult to determine, but at any rate they seem to prove explosive action at some period of its early history previous to the first outflow of the Somma lavas that are visible in the Atrio sections.

During this early stage of activity, or not unlikely previous to it, a gigantic explosive eruption occurred of a grey trachytic dust and fragments of black scorie, which now constitute enormous well-marked deposits over the whole of the Campanian Plain reaching from Gaeta to Salerno, from Capri to Avellino and Benevento and indistinctly represented at much greater distances. This material was ejected in all probability from a vent situated a short distance to the S. W. of Camaldoli of Naples that produced at the same time the piperno, a more fluid analogue of the pipernoid tuff.

ERA B. PHASE I.—That portion of the history of the Somma-Vesuvius volcano which is accurately known is that illustrated by the great section of the Atrio del Cavallo where for a height of 322 m. (or 1073 ft.) lavas, scoria, lapilli and dusts are seen piled one above the other and constituting one of the largest geological sections in Europe. All these lavas are comparatively basic and contain as a characteristic mineral leucite which ranges from microliths up to beautiful crystals over 1 cm. (or $\frac{1}{2}$ in.) in diameter. The other principal constituent minerals are magnetite and its allies, olivine, basic feldspars as anorthite, bytownite, labradorite and much augite. These deposits represent, in section, part of the materials that were added to the great cone when it grew from about 600 m. (or 2000 ft.) to its maximum height of about 2100 m. (or 7000 ft.) and indicate a state of activity almost identical with that presented by Vesuvius from 1631 up to the present. At the end of the period of the formation of these ancient lavas, etc., the mountain must have presented the appearance of a beautiful symmetrical cone about 2100 m. (or 7000 ft.) high with the sweeping curves of its flanks only broken by parasitic cones, some of which can still be seen beneath the tuffs of Monte Somma.

The whole of the Atrio section is traversed by numerous dykes many of which no doubt reached the surface and there supplied parasitic cones and the resulting lava streams. Some of them are hollow or in other words the central fluid portion having drained out from some parasitic cone at a lower level on the flanks of Somma. Some even have been refilled and again emptied no less than three consecutive times.

Near the centre and lower part of this great section corresponding to the nuclear portion of the ancient cone all the originally loose materials such as scoria, lapilli, etc. are compacted and soldered together, no doubt in consequence of the original weight of the cone and the high temperature in the vicinity of the old chimney. The deposits of this age are also visible in most of the valleys of Monte Somma where they have been uncovered and cut into by denudation.

ERA C. PHASE II.—The great volcano next became dormant for some considerable time so that vegetable soil was formed on its surface and valleys were excavated.

PHASE III. *Period 1.* — Pending the 'progress of denudation above, the stagnant magma in the volcanic duct beneath was gradually dissolving H_2O (1) supplied from the surrounding aquiferous rocks until the tension of the solution rose to a point sufficient to overcome superincumbent obstacles and an explosive eruption occurred forming a crater which truncated the great cone. A very vitreous pumice of whitish colour mixed with the debris of the summit of the cone was spread over the surrounding country as a thin but most persistent bed of from 0.10 to 1.00 m. (4 to 40 in.).

Period 2. — Later as the magma rose from deeper sources, where it had dissolved less H_2O it expanded to a less degree, cooled more slowly and consequently became darker (chocolate) in colour due to the formation of microliths and numerous crystals of extratelluric feldspars, amphibole, micas etc. The deposit of this scoriaceous pumice, or often pumiceous scoria, may attain as much as 4 m. (12 to 14 ft.).

Period 3.—Superposed upon the last but without any definite unconformity are beds of fine rounded lapilli in which the essential eruptive ejecta form the smallest portion and consist of fragments of dense, crystalline, black, pumiceous scoria an exaggerated crystalline condition of the products of *Period 2*. Rounded lapilli of dense leucitic lava, no doubt derived from the crater sides and ground up until small enough to be carried to the slopes of and volcano, constitute the most important constituent of the deposit; there are, besides, numerous yellow or brown much fumarolised fragments of similar rocks. The thickness ranges from 0.80 to 4.00 m. ($2\frac{1}{2}$ to $13\frac{1}{2}$ ft.)

(1) The formula is used here as it denotes no special physical condition of the substance it represents. The phenomenon is analogous, at the temperature at which it occurs, to the solution of CO_2 in water, at ordinary temperatures.

Period 4.—The last described deposit sometimes passes up into, or may be represented by, a bed of very coarse leucitic breccia. This deposit is remarkably developed in the Vallone Pollena and Grande above Massa di Somma where the valley sides show a thickness of from 2 to 55 m. (7 to 64 ft.). In a purplish brown dust are numerous fragments of old lavas, scorias and other constituents of the great cone; the blocks of the first named often attaining some tons in weight. How these materials reached this particular slope of the mountain in such abundance cannot be determined; two alternative explanations, however, suggest themselves—either they are alluvial from the wash of the crater walls, having issued by the lower lip or a lateral baranco of the newly formed explosion crater at the commencement of the PHASE; or they represent the last explosive efforts of PHASE III, ejected from some later opening which may possibly be represented by the depression between I Canteroni with the Observatory ridge and the mass of Somma. The internal arrangement of the materials is rather against an alluvial origin. It must be remembered that the main explosive crater must have been much smaller than that represented by the present Atrio del Cavallo.

From these deposits it is seen that PHASE III commenced with a violent explosion, which after excavating a crater and covering the mountain slopes with a white, vitreous, and later by a denser, darker, more microcrystalline pumice, the explosive action was reduced to grinding up the materials of the crumbling in edges of the crater cliffs and ejecting them as small fragments until most likely the vent choked. Probably after a short time the obstructing materials were suddenly blasted out giving rise to the *Period 4*.

PHASE IV.—As I have elsewhere explained the mechanism of eruptive action, we should expect that the direct sequence to the above phenomena would be the issue of magma from the chimney, no longer so rich in vapour as to be fragmentary, but in the form of continuous lava flows. It is the appearance of these lavas or the return of chronic activity which constitutes a new phase. What repair, if any, to the crater of PHASE III took place, nothing is known, but it is not unlikely that an eruptive cone of considerable height was built up though no lava streams seem to have overflowed the edge of the great crater, instead, radial dykes reached the flanks of the great cone and burst forth, building up parasitic cones from which streams of lava poured. Two of these eruptive apparatus are well shown in plan in the large geological map; that of the Val Sanseverino at an altitude of 375 m.

and one of the the Val. Von Buch where the eruptive cones are seen in section, whilst at a lower level on the slopes, the lavas that issued from the same are exposed in numerous ravines, indicated in the map by a brown tint. These lavas differ from the older ones of Somma in that their felspar is in considerable part a sanidine or near ally, whilst leucite is nearly absent and the lava, especially the earlier outflows, possesses a very fine vesicular structure more of a pumiceous than a scoriaceous character. At the Val. San Severino two distinct lava flows are superposed, the upper approaching much more the usual type, showing that the activity was still advancing towards the true Vesuvian character thus really representing two eruptive periods.

PHASE V. — What circumstances brought about a stage of repose in the volcano I can offer no suggestion, but that such repose did occur is proved by the numerous deeply weathered surfaces and vegetable soils subsequent to the last deposits and antecedent to the ejection of new eruptive materials.

PHASE VI. *periods 1, 2, 3, 4.*—The energy stored up during the preceding epoch of quiescence again resulted in explosive eruptions: no less than four of which occurred consecutively during PHASE VI. The description of each would here occupy too much space and for minuter details reference should be made to my original paper in the Quart. Journ. Geol. Soc. Lond. 1884. Each eruption was characterized first by the emission of lighter, whiter, more vitreous pumice with porphyritic enclosures of intratelluric or pre-eruptive formed minerals, principally sanidine, amphibole, mica and a little magnetite, followed as the eruption progressed by more microlithic, denser, and darker varieties with much pyroxene and magnetite dust and microlithic feldspars but *with no leucite*. These beds of pumice contain also numerous fragments of old lavas, scorias, etc., constituting the remains of the great cone which was being eviscerated by a gradually enlarging and deepening crater. The apex of this crater soon extended down below the limit of volcanic rocks into the subvolcanic platform so that we find numerous fragments of fossiliferous quaternary (?) calcareous conglomerate, quaternary clays, mudstones and sandstones in the bottom of the deposits of *period 1* whilst the subjacent baked limestones were reached towards the end of that outburst. In later eruptions, especially that of *period 4* the crater apex had extended down to the deeper-seated limestones, often entirely converted into different silicates or ultrabasic rocks, so as to graduate into the very volcanic rocks that metamorphosed them. In fact these accidental ejectamenta

form a very important constituent of the deposits. I have estimated that at the end of the four eruptions the crater apex must have been 800 m. (about 2660 ft.) below sea level.

The third and last material ejected in all these explosive eruptions is a fine dust which is produced in part by the interstitial disintegration of the magma by the formation and escape of vapour, which, however, is then no longer sufficiently powerful to project any materials but fine dust so that they could fall on the cone sides beyond the crater rim. Some of the fragments of the cooled magma, materials from the crumbling crater-walls, etc. gravitating down to the crater apex where meeting at the bottom with the escaping vapours are by them churned and ground up and ejected from time to time as fine lapilli, sand, or dust. These dust deposits are often met with on Monte Somma, and possess a vesicular, pisolitic, concretionary, to false-bedded or even re-sorted structure due to their deposition taking place at a time when rain was falling more or less plentifully.

All these eruptions were prehistoric with the possible exception of the last, about which some doubtful legends are sometimes quoted. Each one did much to progressively excavate an extensive crater within the heart of the great cone, truncating it to nearly one half of its original height. The limits of this crater extend from about the 650 m. contour line on the S. of the mountain round the Val d'Inferno on the E., the eastern end of the Canteroni ridge on the W., and the great escarpment of Monte Somma that overhangs its remains, now known as the Atrio del Cavallo. The great Atrio cliff section is part of the old crater wall which may have slightly been re-pared by the first historic or plinian eruption. Some, if not all, of these outbursts occurred from an axis to the W. of S. of the one around which the old cone of Somma had been built up; a very common occurrence in volcanoes. The reason of this displacement was in all probability the resistance offered by the old plug of cooled lava filling the chimney and the greater height of superincumbent rock over the old axis of the cone. The crumbling in of the sides and the materials washed down from them soon filled up this great hollow nearly or quite to the level of the deepest notch of the lower edge of the crater rim in which state it was in the time of Strabo and Spartacus. Some old wall paintings found at Pompei show us the cone truncated obliquely, due as I have said to the excentricity of the axis or axes of the explosive eruptions. It is to this ruin of the grand old cone that the name of Monte Som-

ma is now understood by geologists, which corresponds to that portion of the mountain in existence up to the year A. D. 79.

PHASE VII. *Period. 1.*—In the year A. D. 63 a violent and destructive earthquake to a great extent ruined the town of Pompeii, which was followed by other shocks. In the month of November A.D. 79 another explosive eruption burst forth destroying Pompei, Herculaneum, Stabiae and numerous villages and country houses. The materials then ejected are very similar to those produced during the earlier explosive eruptions with the exception of one very important character, namely, that all the pumice contains microlithic leucite in considerable abundance which not only is the case with this, but also with every subsequent eruption. We know from Pliny's account that the wind was blowing from the N. so that the pumice beds of this eruption are hardly recognizably represented N. of a line drawn E. and W. through the Punta del Nasone, the highest point of Monte Somma, whilst it forms very important deposits to the S. of that line, and especially to the E. where great quantities fell upon the limestone mountains of the Sorrentine peninsula, although the culminant point, M. Santangelo, is 166 m. (or 500 ft.) higher than the present summit of Vesuvius, that is to say 500 m. (or about 1500 ft.) above the lowest edge of the then crater. The characters of the ejectamenta can be beautifully studied in the streets of Pompeii where they are separable into three divisions of (1st) white vitreous pumice, 2m. (or 6 ft.); (2nd) darker microcrystalline pumice, 2 to 3 m. (or 6 to 9 ft.); (3rd) pumiceous dust, which is nearly always pisolitic and of variable thickness. At Herculaneum these several materials, mixed with others into one rather uniform paste, has gradually consolidated into a more or less compact yellow tuff, which attains a thickness of 20 m. (or 60 ft.) or more; whilst that covering Pompeii rarely exceeds 8 to 10 m. (or 25 to 30 ft.) and often is much less. At Pompei the regular arrangement and stratification indicate that the materials fell through the air; whilst those at Herculaneum on the other hand owe their present arrangement to the action of water collecting and transporting the materials down some baranco or valley.

It is probable that this eruption, even at its commencement, did little to enlarge the preexisting crater but probably towards its close it built up a narrow, low crater ring within the great Atrio crater, thus laying the foundations of the new cone of Vesuvius.

PHASE VII. *periods 2 to 6.* — In the years A.D. 203, 243,

305, 321, 471 or 472 and 512 * eruptions are recorded from Vesuvius. The long intervals between each with no record of chronic activity intervening indicate that these were more nearly related to the explosive type of eruption and deposits of materials corresponding to such do occur at the Canale di Arena and many other spots. The different beds vary very much, but all present certain characters in common. In the first place the essential ejectamenta contain leucite in abundance. This mineral attains in these pumiceous scorias and scoriaceous pumices the greatest size and perfection so that beautiful crystals nearly 3 cm. in diameter are sometimes met with. The shorter intervals between the outbursts and the shorter time allowed for the solution of H_2O will account for this, as well as for the denser more microlitic and crystalline structure with marked increase in size of all the extratelluric minerals and the presence of fewer sanidines and amphiboles. One bed indeed is composed of a very vesicular scoria. In my original memoir an attempt is made to correlate these deposits with some of the above mentioned eruptions,

All the recorded eruptions of 1036, 1038, 1049, 1138, 1139, 1306, 1500, 1568 and probably many others, from what little is known of them, were of the paroxysmal, rather than the explosive type. It is not unlikely that the main portion of their products were fragmentary and went to build up the Vesuvian cone as represented in engravings before 1631. In fact the great development of cone and small crater indicate with certainty the feeble disruptive power of these later outbursts. It is mentioned that in one or two cases lava flowed, but if so it probably was confined within the then unobliterated crater fosse between the new cone of Vesuvius and the great crater rim of Somma.

ERA D, PHASE VIII. In 1631 there occurred one of the most terrible eruptions of Vesuvius. It was not of the explosive but rather of the paroxysmal type and besides the fragmentary ejecta consisting of scoria, lapilli, sand, etc., numerous large streams of lava poured down the slopes of the volcano burning up in their course and burying towns and villages with a great destruction of life. Since that date the volcano has never been completely dormant for any length of time. Generally its activity consists of feeble but constantly varying explosions at the main vent,

* Since writing the above, evidence has been brought forward of an eruption in A.D. 780 when, from the description, lava appears to have flowed.

accompanied often by a slight dribbling of lava from some lateral opening near the summit of the great cone. This state is interrupted from time to time by paroxysmal eruptions which are due to the formation of radial dykes extending from the main chimney outwards to the slopes of the cone. As much of the lava as there is in the main chimney, above the level of the new vent, drains off immediately, thus lightening by so much the pressure on the remainder, which, consisting of a solution of a gas in a liquid, immediately on the pressure being reduced, froths up and issues forth after the first lava by the lateral outlet, whilst most of the vapour escapes up the main chimney. It follows therefore that, other influences apart, the outpour of lava is in direct proportion to the vertical distance between the original height of the lava column and the level of the new lateral opening, though the quantity is much more than that which was contained in the chimney above the level of the lateral opening. The principal parasitic cones now visible of which the dates of their formation are known are those thrown up during the eruptions of 1760, 1794, and 1861. The largest, however, is Camaldoli della Torre, which is certainly of considerable antiquity since the monastery built on its summit dates from a period earlier than 1631. I have never found any evidence that could fix its date more approximately except the following. On the coast opposite there crops out a peculiar and unique, fine, vesicular lava which is covered by some remnants of the pumice beds of PHASE VI. The resemblance of this lava to that of PHASE IV, the fact that it is earlier than Phase VI make it not improbable that it may be of the age of the former. In a well recently made at the foot of the Camaldoli cone, scoria much resembling the above mentioned lava was obtained and it may hence be suggested that they both issued from this spot. All therefore that may be said is that *probably* Camaldoli is referable in age to PHASE IV. The Fosso della Monaca, a deep conical hollow bordered by a rim of lava scoria, stands just above a lava-cake and scoria cone called Bocca il Viulo. They both appear comparatively fresh and, although their date is not known, there is some evidence to show that they were both points from which issued part of the lava in the 1631 eruption.

The lavas of PHASE VIII differ little from those of Monte Somma, the larger streams are generally finer grained because they have come from great depths and issue more quickly, whilst the smaller streams that dribble near the top of the cone are characterised by larger crystals, especially those of leucite, owing

to the long time allowed for crystallization whilst the magma is simmering in the top of the chimney. For the same reason the larger streams are generally very rough and scoriaceous on their surfaces whilst the shorter ones tend to have a corded surface since their contained H_2O has to a great extent been boiled off before they flowed out. The same arrangement and characters can be traced in the ancient lavas of Somma, only they often appear to be more leucitic since that mineral from the more advanced decomposition is whiter and more obvious.

During this recent phase of Vesuvius dense black lapilli has been spread over the slopes of the volcano for considerable distances and form deposits of considerable thickness. As we recede from the eruptive axis of Vesuvius the deposits of these lapilli thin out so that they offer no definite boundary line. I have, however, attempted to indicate on the great geological map the area where these lapilli form an important constituent of the surface soil by the red dots on green. The great screen of Somma seems to have confined their distribution to the N. and they extend much farther to the E. than the W. probably because strong winds were blowing in that direction during some of the great eruptions. The valleys and ravines on the E. N. E. slopes of Mt Somma are thickly clothed with a mantle of these lapilli so that few of the older deposits are visible.

SURFACE EROSION

The sides of Monte Somma are scored by deep valleys and ravines which were in great part cut out before the old Somma cone was truncated down to its present shape, as the valley depressions extend up to and notch the crowning ridge forming a series of serrations. Physically each valley may be divided into three sections — the upper third has the greatest fall but widest area and forms the gathering ground for the water which descends to the middle section, where from a slightly diminished inclination and the great head of the water, erosion progresses with great violence, cutting out deep and narrow ravines. As it descends, its energy has been gradually expended, it is charged with enormous quantities of solid matter (often 15 to 20 p. c.) and on reaching the lower third of the valley, where the incline is but slight, its speed is diminished and much of its burden is deposited as it flows on, though a considerable volume sinks into the porous soil. In consequence of this the solid materials, which had already been deposited in the form a dejection cone or alluvial fan,

eventually blocks the course of the stream, so that it eventually has to cut its way through this cone, forming a lowly inclined valley and bounded by almost vertical escarpments, locally called a *Lagno*, whilst the upper portions are called *Vallone*. The result of all this is that the upper section of the valley is almost un-eroded, the middle section looses much material and therefore lowers the surface of the mountain at those levels, whilst the toe of the slope is pushed out on to the plain, so that the volcanic cone assumes a concave slope not due to subsidence as is sometimes supposed to be the cause. As long as the valley is being excavated in the soft materials these crumble away and leave sloping banks but when the old lava streams are reached and cut into, the sides then formed remain perpendicular so that the *Vallone* would consequently show a Y shaped section. When erosion extends down and through the lava beds which alternate with scoria and other fine materials, the valley bottom gets broken up into steps because the lava beds resist erosion and remain as ledges, which of course much impede any further rapid excavation. All these valleys are for the greater part of the year quite dry and it is only when the rain-fall is in excess of the rate of absorption by the porous soil that these valleys become water, or more properly mud, or *moya* courses.

Along the intervening ridges the usual foot-paths are made and on account of the incoherent nature of the more recent deposits (PHASE III, IV, V, VI, VII, VIII), the vegetation shield of the surface gets cut into and gives the rain and wind a fair start soon converting the tracks into deep narrow trenches often not more than 3 or 4 m. broad and 10 m. or more deep. This commencement of a valley, for it eventually becomes one, is called locally a *Cupa*.

During different great eruptions, the valleys have been choked by the ejecta and then cut out afresh, sometimes along a new axis; the *Vallone di Pollena* is a good example of this and a section of it to scale may be consulted in my original paper already cited.

Want of space limits this description rendering it very sketchy but it must be born in mind its only object is to give the reader an idea of the principal facts. Anyone requiring further details may, for the time being, conveniently refer to the following papers.

Phillips J. — *Vesuvius*. 1868.

Lobley J. L. — *Mount Vesuvius*. Second edition, London, 1889.

Johnston-Lavis. — *The Geology of Monte Somma and Ve-*

surius being a Study in Vulcanology. Quart. Journ. Geol. Soc. Lond. 1884, Vol. XL, pp. 35-112, 2 wood-cuts and 1 coloured plate. — The Relationship of the Structure of Igneous Rocks to the Conditions of their Formation. Sci. Proceed. R. Dublin. Soc. 1886, Vol. V. N. S. pp. 112-156. — On the Form of Vesuvius and Monte Somma.—Geol. Mag., Dec. III., Vol. V., pp. 445-451, Fig. 1.—The Geological Map of Vesuvius and Monte Somma. Scale 1:10,000. With a short letterpress description. Philip & Son, 32 Fleet Street, Lond.





CHAPTER IV.



NOTES ON THE EOLIAN ISLANDS

AND ON PUMICE STONE

BY D.^r L. SAMBON

Srof. J. W. Judd published in the Geol. Mag. for 1885 an interesting series of papers upon the geology of the Lipari Islands. More recently, Doctor Johnston-Lavis in several publications as well as in the preceding account has well illustrated the physical history of Lipari and especially the last eruption of Vulcano, the masses of obsidian and pumice ejected by it and spread in great abundance around the base of the cone, as fruit from the pine of smoke which rose as a gigantic mass from time to time from the crater, will always retain the expressive name of *Bread-crust bombs*. In consequence I should only repeat what has already been said were I to write upon the same subjects. I will therefore only give a few unpublished notes on the pumice and obsidian of Lipari and some legends of the locality.

The Eolian archipelago composed at it entirely of volcanic materials is of uncommon interest to the geologist. Its islands represent the summits of an extensive submarine volcanic region that emerges above the surface of the sea, and is situated between the phlegrean fields of Sicily and fertile Calabria.

The first formation of these volcanoes extends back to the early pliocene (astiano). Prof. V. G. Seguenza discovered on the N. coast of Sicily between Capo Orlando and Faro, opposite the Eolian Islands, stratified deposits of pumice, etc. mixed with numerous fossils which without doubt belong to that epoch.

One day, possibly during a dead calm, a frightful struggle commenced between fire and water. One can imagine an immense column of water rising as from a gigantic torpedo explosion, accompanied by clouds of vapour and fragments of rock, shutting off the light of day. On the surface of the sea, dark irregular waves covered with pumice, algæ and dead fish, rolled towards the shore. At night great columns of smoke illuminated by lightnings, and showers of red hot stones, showed like an immense flame rising from a terrible conflagration. The enormous collection of dust, rock fragments and lavas accumulated and rose above the surface of the sea forming islands from which still flowed the lava.

Thus appeared these islands, as, in our own epoch, have risen Graham's island, Santorin and Sabrina. Many of these were soon destroyed by the waves, but where outflows of lava took place, the more compact rock was able to protect the looser materials from the action of the water. There have also been recorded in historic times the separation of large islands into smaller ones or the entire disappearance of one or more.

The orography of this archipelago must have continually changed from the time the first island emerged till the present day.

In the year of Rome 627 Vulcanello rose, and by other eruptions, was united to Vulcano in 1570. The great island of Eolia that once existed between Stromboli and Salina is now reduced to several different islets and reefs, ruins of the ancient cratonic amphitheatre (1).

The islands that constitute the actual archipelago are the great monuments of its history. Every stone is an inscription or epitaph in which the geologist reads the details of this terrible battle of Titans.

Volcanic islands which at all times and places emerged or were destroyed, were certainly the origin of the many legends of *mysterious islands* which one meets with in reading medieval writings, and especially Arab Chronicles. Even Christopher Columbus speaks of capricious or enchanted islands which at

(1) See note to page 62.

times are invisible to navigators and at other times allow themselves to be seen, but never permit anyone to land upon them. These fugitive lands were also called St. Brandon's islands in consequence of the legend that this saint on his voyage to the Isles of the Blessed, landed with 17 devotees upon the back of a whale. The fear of demons and enchantments terrified the most courageous mariners the moment they observed any uncommon phenomenon. Before their minds was always the immense hand of Satan which often had emerged from the waves grasped ships and dragged them down into the abyss.

The actual Lipari islands present several eruptive centres of different periods, immense agglomerates and flows of a variety of products. Prof. Judd divides their eruptive cycle into three phases.

1st At first one great volcanic mountain was formed.

2nd Radiating from this central volcano three fissures appear to have been originated, and at various points along these fissures volcanic cones were thrown up, and numerous eruptions took place.

3. The apparently dying energies centred in this volcanic district were localized at two almost extreme points.

The products of these three periods are different. In the first we find various trachitic materials approximating to, but never reaching, the basalts on the one hand, and the quartz trachytes on the other. The second period is also formed of trachytic lavas, but there appears to be a constant tendency in them to graduate towards the rocks of the basaltic type.

In the third phase, whilst Vulcano is still active, ejecting very acid materials such as quartz trachyte (liparite), which often assumes the vitreous condition, Stromboli, the other active volcano at the opposite extremity of the group, gives forth materials essentially basic, as dolerite and basalt.

Nearly all these islands have the form of truncated cones. The most central is Salina, formed of two volcanoes which have a common base and are similar in form, in arrangement and height (1). The other isles are disposed along three radii more or

(1) To the N. W. side of the island the toe of one of these cones M. dei Porri has been drilled away by a large explosion crater, during the formation of which considerable quantities of a basic pumice was formed and spread over the island. These pumice beds exhibit the peculiar division into vitreous and microlitic varieties as first described by me at Vesuvius and elsewhere. More than a third of this crater ring has been carried away by the sea but the Scoglio Faraglione marks a remnant.

less straight which start, in fact, from Salina. Upon the N. N. E. radius lie Panaria, Basiluzzo, Lisca Bianca, Lisca Nera, Bottaro, Dattilo, and the Formicoli; so many ruins of a single volcanic island now destroyed, the largest and probably the oldest of the group (1) which now is only a great submerged solfatara, a drowning volcano, its last gasps a gush of carbonic acid and sulphuretted hydrogen rising in great bubbles to the surface of the water near Bottaro, which the sailors and fishermen call *Caldaie*.

Farther on is Stromboli, the great natural lighthouse of the Mediterranean, notable on account of its approximately circular plan and its constantly active crater. To the N. E., about a kilometre distant, rises from the sea with almost vertical walls a rock called La Petra or Strombolicchio, a great mass of very compact trachyte, the last remnant of another eruptive centre dismantled by the waves which, during a tempest, often cover it.

On the western radius is Filicuri, composed of two volcanic cones one much higher than the other. Farther on lies Alicuri, composed of a single cone with very irregular outline in consequence of the numerous lava streams, that reached the sea. So extensive is the growth of heather upon this island that its name is supposed to be derived from that circumstance. A great distance off is the small island of Ustica.

On the southern radius stands Lipari, formed of several volcanoes, irregularly arranged and differing in form, size, and age. Finally rises Vulcano, an immense ancient crater from the centre of which emerges the cone of historic eruptions. Near the northern ruined edge of the crater-wall is situated Vulcanello joined to it by a narrow neck of land.

These islands were called by the Greeks « Hephestiades » and by the Latins Vulcaniæ; the famous forges of Vulcan and his Cyclops. They were also called Eolian isles from Eolus whom fable raised to be god of the winds and who gained his reputation by predicting the weather from the smoke or the columns of vapour rising from the active volcanoes of his dominions. Even now the Liparites consult the summit of Stromboli and Vulcano, whose vapourous plumes, indicating the direction of the wind and the

(1) The popular idea was that this group was once a single volcano which to my mind is quite a fallacy for both Panaria and Basiluzzo are very extensive and well preserved remains of domes or mamellons of quartz trachyte whilst some of the islands are comparatively basic in composition.

hygrometric state of the atmosphere, are precious indications of the weather.

In the middle ages, when the wonders of mythology were no longer received, religious legends were attached to these volcanoes and still live in the popular mind.

It is said that Theodoric was confined in the crater of Vulcano as a punishment for his sins. A monk of Lipari asserts that he saw him dragged to the island with his hands bound behind him, barefooted, and taunted by the unavenged spirits of the pope John and the Patrician Simmaco who hurled him into the burning crater.

When S. Calogero inhabited a hermitage on the island of Vulcano, he recounted to a pilgrim who went to visit him "Do know you that in this island are hollow places, full of wind and fire which escapes from certain apertures of this mountain commonly called the bocca di Vulcano; there one often sees going in and out demons in different shapes". In consequence of the devils becoming too insolent in the island of Lipari, S. Calogero himself drove them from the Montagna delle Pietre Nere, where they lived, They then took refuge in the stufe (fumaroles) producing terrible explosions, and in consequence even hence the holy man hunted them out and drove them into the crater of Volcanello, finally compelling them to give way to their rage in Vulcano.

*
* *

The largest of the Eolian islands is that which the Greeks called *λίπαρος* that is *The Splendid*. It is certainly one of the most beautiful among the Mediterranean Sirens — renowned for the variety and beauty of its rocks, the fertility of its soil, the mildness of its climate, the pumice stone with which it provides the world, for its sweet currents, and its exquisite wine. At one time it was powerful, and its fleet was queen of the seas by which it dispatched splendid monuments of art, to Delphos in perpetual memory of its victories in the Mediterranean; — now it is a colony of convicts,

There still exist at Lipari, as remnants of volcanic activity, two thermal springs — one of about 60° C. to the left of Bagno Secco and forming a brook of such volume as at one time to serve as motive power to some mills; the other of 92. 5° C. in the valley of Bagni Caldi, where it issues from a cave and is employed for bathing purposes. In this western region of the island,

and especially in the neighbourhood of M. Mazzacarusso, the lavas and agglomerates have undergone much decomposition by recently extinct fumaroles. A few other unimportant thermal springs and fumaroles of aqueous vapour at a short distance from the city, and others seen by Mercalli on the S. E. flank of M. Sant' Angelo.

Of eruptions at Lipari there are no definite records, and it is doubtful whither we may believe *ad litteram* a codex of the XII century, recently discovered by P. Cozza in the Library of the University of Messina (N.° 103, p. 168), in which, commenting the words of S. Patrizio upon subterranean fires, are added those which later were written by the monk Gregorio inspired by the sight of fiery volcanoes (1). "In this manner have spoken the saints: if some one does not believe, let him consider the island of Lipari which is so subject to fire that the sea boils to such an extent as to swallow up ships which happen to be there, whilst pitchy lava flows, and tremendous thunderings are produced. Then all Lipari trembles with the shocks, the sea sand on fire is raised even from the deeps to infinite heights and is transported by the winds to great distances".

"Some say that when it is known that some vile and iniquitous person leaves this life, then those places experience eruptions and thunder as if he had been condemned to expiate his crimes there".

"For at these places even I, Gregorio, passing after the sacred synod of Nicea, heard and saw these marvellous things".

What the old monk says of submarine eruptions is exact. At all periods we have descriptions of eruptive phenomena in the sea near the Eolian Islands, and in nearly all the eruptions of Vulcano the neighbouring water has become torbid and agitated by a multitude of big bubbles, with scoria and dead fish on the surface.

In the last eruption which the Geologists' Association witnessed, the submarine cable was broken three times since it was laid in 1881 between Capo Milazzo in Sicily. Dr. Johnston-Lavis first drew attention to this fact, and the details of the later ruptures were carefully published by Sig. G. Platania. The first

(1) The eruptive mouth and obsidian lava stream above Canneto which has a very recent look and is known by the name of Forgia Vecchia (old forge) which would rather indicate activity at that locality within the memory of man.

time was during the night of Nov 21-22, 1888, at 5.924 knots from Lipari. A considerable portion was then found beneath stones and mud. The second was on the 30th of March 1889. The cable was not broken; but, in the words of the commander of the repairing ships Robt. Greely, the central conducting wire was bared, the guttapercha covering softened, the jute involucre worn away and the steel wires bared and eroded for a distance of about 90m. The cable broke whilst being removed from the water, although it should have resisted a much higher tension. At that spot it was observed with astonishment that the sea was 68m. less than the depth obtained in soundings made on previous occasions.

The third fracture occurred the 11 of the Sept. 1889. The cable was found crushed in several points but rather nearer to Lipari, and at one place it was entirely severed.

At the time of the first reapture the fishermen saw a boiling of the sea and much pumice in the water. On Nov. 27 at about 3 p. m. Signor Picone, who happened to be in a boat about 1 km. east of Vulcano, all of a sudden was nearly wrecked. The sea, that before had been perfectly calm, became agitated and boiling, whilst pumice floated at the surface. The boiling covered an area of 300 m. Contemporaneously Vulcano gave an explosion of stones and lightning.

This is not the only example of the breaking of a telegraph cable fixing the site of a submarine eruption.

The town of Lipari offers few objects of archeological interest. In the *piazza* near the quay is a statue of little artistic value but important to the Lipariotes as being that of their patron, St. Bartolomeo. It may be interesting to mention here the origin of the special favour in which this saint is held by the inhabitants.

Sicardo, a tyrant of Benevento, upon whose conscience weighed innumerable murders, rapes, treason, robbery, and torture, having learnt that superstition could make amends for crimes, sent envoys to all parts in search of bones and relics of saints; He had already collected many a treasure, when there fell into his hands a most miraculous relic, unequalled by any other. The Lombard ships which cruised about the isles chasing the Saracens in 838 found, on touching at Lipari, the body of S. Bartolomeo well preserved and entire in a marble sarcophagus which had come floating from the mouth of the Ganges to the Eolian islands; where, being recognized, and how should he not be!; altars were raised to him and he was adored, until

the musulmans spoilt everything. Of course the the saint's name is a very common one amongst the inhabitants of these islands.

We had hardly landed at Lipari when we were met by a little, badly dressed, bare-footed man, the guide Bartolomeo "un buon diavolo" who, the moment he saw Dr. Lavis capered about and showed his joy just as a dog does on meeting his master. We proceeded with him to a "cantina" where the excellent malmsey wine of Lipari soon restored our forces. We then decided to make the ascension of the M. della Guardia, to observe by night an eruption of Vulcano.

Bartolomeo collected several boys, not a difficult matter, for at the door of the "cantina" all the urchins of the place had gathered. The boys lit up large bundles of sticks to serve as torches and we started. The torches gave plenty of cheerfulness but little light, and the path was so bad that we often stumbled. Nevertheless we got up pretty quickly being urged by desire and curiosity.

It was a soft and serene night, without moon, but brightly lit with stars. The boys disputed for the torches which gave out showers of sparks; we chaffed each other whilst Bartolomeo, at the top of his voice, sang to a "buccuzza zuccarata, capelli riccia, uechiuzzi sapuriti" (sweet lips, curly hair, and delicious eyes) Arrived at the top, we extinguished the torches, leaving only the lantern of Bartolomeo alight. The boys dispersed to pick grapes whilst we gazed into the immense obscurity in which with difficulty Vulcano and Vulcanello could be distinguished like two confused black patches. The roar of the waves was audible, and we asked each other whether it was not the boiling up of Vulcano. To the N. N. E. from time to time the fires of Stromboli shot forth.

In the Eolian islands there are several mountains called Monte della Guardia on account of the permanent sentinels that occupied their summits even up to 1830 to give warning of the approach of Saracen corsairs, who often came from Algiers and Tunis on predatory excursions.

A story is told that once upon a time a large fleet was signaled, and the poor desperate Lipariotes addressed their supplications to S. Bartolomeo; who appeared with a knife in his hand, and ascending to the castle cut some leaves of the fig cactus which he threw into the sea. These leaves immediately turned into so many ships, upon which the Liparotes embarked and chased off the pirates away.

For more than an hour we remained sitting on the ground

awaiting an eruption, and were just on the point of leaving when at 10.30 p. m. the crater of Vulcano exploded with great violence, liberating immense volumes of vapour. In the gigantic smoke column we saw five successive flashes of lightning of a clear azure color, and shortly after was heard the thunder mingled with the roar of falling stones. The lava fragments thrown on to the slopes of the cone retained for some time their incandescence of a dark red colour. Farther off to the S. W. the scoria set kindled the broom-bushes, from which rose brilliant flames forming a striking contrast to the dark red reflection from the column of vapour. In a few moments nothing was observable except a cloud of dust which the wind spread across the starlit heavens.

In returning on board our steamer we were again feted by Nature's fireworks, every stroke of the oar, every shake of the cables produced phosphorescent tipped waves of rare beauty in consequence of the great abundance of *Noctiluca miliaris*.

Some products of these islands particularly interest visitors from northern climes, and perhaps a few notes on some of them may be of interest to future travellers.

The *Opuntia ficus indica* "fichi d'India" or prickly pears, a plant of South American origin, grows in great abundance in the Eolian islands and all Sicily. They form long impenetrable hedges and often wall in the farms. The fruit of this plant is often the only summer nourishment of the peasant. In the Piazza of Lipari where the market is held, stand rows of peasants behind baskets full of this fruit. The moment a customer approaches these sellers remove the skin of a dozen *fichi* with incredible dexterity. Even if several customers come together, however quickly they may swallow the fruit, the seller does not allow them to remain empty handed.

At the time of our visit the convicts could be seen running about with large willow or bamboo baskets full of the little blue-black grapes of which our so called dried currents are made. The heat, our thirst, and the sweetness of these minute grapes made us play havoc with numberless bunches. To make currents the Lipariots pick the grapes when quite ripe, throw them into a lye made from wood-ashes of varying strength according to the maturity of the grape, and then dry them in the sun.

*
* *

All the best pumice of commerce is obtained from the north-east region of the island of Lipari extending as far as the

summit of M^{te} S. Angelo on its northern slope. The quantity is prodigious that was ejected during the eruption of Campo Bianco. It is excavated at the Fossa Castagna near M. Pelato, at M. Chirica, and on the shore of the Mosche.

I visited a quarry of M. Pelato on the outer southern side. The height was about 150 m. and 1m. large. The entrance was sustained by poles, faggots of brushwood and stones; at first one descended for 160 steps, then one ascended for about 50 m. where two naked men were digging in the dull light of an oil lamp. In descending I met some young men who were carrying up baskets full of pumice. They wore short coarse linen drawers, and on their naked breast hung the blessed scapulary. On my arrival at the workes they made me sit down on an empty basket while I watched the men dig out the pieces of pumice, often the size of a human head, from the imbedding matrix, which is composed of different sized fragments and dust of the same material, pressed together, and forming an incoherent tuff. They told me of their poor wages, and the dangers of their work in consequence of the frequent collapse of the workings, killing men and youths. It was horrible to hear those accounts of misery and misfortune at the bottom of these caves.

The low roof and narrow passage from which every moment fragments detached themselves seemed to threaten the collapse of the whole; and it was with great relief that I again reached the daylight. Only a few weeks previously a quarry of M. Pelato had collapsed and buried some workmen, and more than two days work were required to reach them. These unfortunate men, saved by a miracle, returned again to their work, for what else could they have done to obtain bread?

Prolonged and curious was at all times the discussion concerning the origin of pumice. It was believed to be amianthus decomposed by fire by Pott, Bergman and Demeste; calcined lignite or schist by Vallerio; scorified marl by Sage and granite that had become blown up and fibrous by the effect of fire and water by Dolomieu (1). The latter asserted having found enclosed in some pieces of pumice fragments of granite. He also declares that he had seen masses of granite which took on gradually the

(1) It is wonderful how nearly correct was the assumption of Dolomieu when chemical and geological science was in its infancy. The cutting satire of Spallanzani is often equalled or surpassed by more modern Italian scientists at the expense of foreign investigators and often as little justified. EDITOR.

fibrous structure and other characters of pumice ; so that he concluded that granite or granitoid schist was the primitive material which by the effect of the volcanic fire passed to the state of the pumice (1). Finally he declares he sent specimens to all the most learned geologists of the time. Spallanzani, who visited that same locality and hunted in every part of Campo Bianco in a most diligent manner but without being successful in finding the granite of Dolomieu, says wittily that probably the French geologist had carried them all away. Spallanzani himself, on the contrary, considers that pumice and obsidian are the result of fusion of great masses of intermediate lavas which one encounters on all parts of the mountain. Prof. J. F. Blake recently, probably ignoring the observations of Spallanzani, is satisfied in finding in that locality "Mother-pumice" as he has baptized it, from which also is derived the obsidian. But pumice, obsidian and all intermediate rock varieties more or less scoriaceous are but different forms of the same eruptive product. The whole history and modifications of pumice have been worked out by Dr. Johnston-Lavis, who has shown that by studying these eruptive products the whole mechanism of volcanic action in general is explained and the sequence of eruptive phenomena of any volcanic focus can be made out.

The eruption of Campo Bianco was certainly of a very violent character, as we can judge from the great quantity of pumice and the enormous stream of obsidian.

This obsidian is at its surface scoriaceous and often almost pumiceous, because here, pressure being least, the remaining vapour could expand into bubbles which were prevented from escaping by the cooling and viscous glass. Thus we see extensive scoriaceous crests where the escape of vapour was greatest. The whole surface is split into great irregular slabs of all sizes, with edges curved, contorted and often folded back ; whilst the slabs are cracked by the cooling, and the surface reddened by oxidation so as to look like the bark of a tree.

The interior of the flow is also heterogeneous from the presence originally of major or minor quantities of vapour, the

(1) It is not unlikely that Dolomieu encountered some fragments of partly fused granite, and quartz and felspar inclosed in the pumice. Such inclusion partly fused constituted numerous nuclei of bombs in the two last eruptions of Etna. We found the same in the ejectamenta of Vulcano and I met with a lava stream at Stromboli crowded with such as also the rock of Strombolicchio.

more or less rapid cooling, and greater or less pressure. Where cooling was slow we find the glass full of spherulites of different size, from the smallest up to that of a Barcelona nut, composed of needles of quartz and felspar arranged in rays. The crystalline mass of the larger spherulites is arranged in so many concentric layers, onion fashion. Often between these strata, spaces are left, upon the walls of which crystals of tridimite, fayalite and magnetite have been deposited. The large hollow spherulites are the lithophysae of Von Richthofen. The obsidian sometimes is crowded with spherulites whilst at others they are rare. Often one finds these bodies arranged in bands interstratified with laminae of pure glass, of porcellanite or of scoria.

These strata are derived from the spreading out of the fluid lava which at the source was expelled in irregular jets or gushes. In consequence, the greater the extension the particular gush was spread over, the thinner will be the lamina. In more liquid and homogeneous rocks such as the basalts, the successive lamination is less marked than in the acid lavas which are viscid and less homogeneous. If cooling takes place more slowly and under great pressure, the obsidian assumes a perfectly lithoidal aspect. Amongst the numerous obsidian streams which we know of, are of especial interest those of the Peak of Teneriffe, a torrent 15 km. long, and that of the Yellowstone National Park, where the rock occurs in enormous prismatic masses. Campo Bianco, with the flow of the Rocche Rosse, was the last effort of eruptive activity in the islands of Lipari.

When we descend to the shore of the Baja delle pomice by the gorge to the S. E. of the great obsidian flow, the slopes facing the lava are composed of immense deposits of pumice in which hundreds of holes are observable, marking the excavations made in search of the larger masses of this valuable rock, much of which could be seen in the numerous baskets standing at hand. The sight of the enormous agglomeration of pumice and dust of a glaring white colour, cut by the action of rain and wind into fantastic shapes, stands out against the blue sky like the irregular crags, spurs and ridges of a great glacier.

Along the marina are quantities of pebbles of pumice, either rounded by the torrents that descend from above or by the waves that lap the shore. When the wind blows from N. E. a veritable fleet of floating masses reaches the port of Lipari (1). The

(1) I have picked up considerable quantities on the beach at Bagnara and other points of the Calabrian coast.

pumice that has been excavated is carried to the beach, and stored and sorted in sheds or caves cut out of the same pumice tuff, protected in front by a breakwater of big stones to prevent heavy seas reaching and washing away the produce.

Pumice in commerce is classified as follows — *grosse* (large size), *correnti* (medium), and *pezzani*; (small); the large and middle size are subdivided into *lisconi* (flat) and *rotondi* (round). The *lisconi* are filamentous (1) and break less easily than the *rotondi*. They are also trimmed by the sorters. The *lisconi* and *rotondi* are again subdivided into white, black, and uncertain, according to their colour.

The price varies according to the quality from 50 to 2000 lire the ton. The common price for the assorted is 350 to 500 lire the ton. As much as 5000 tons a year are exported. The best pumice is that of Campo Bianco. It is also obtained at Pèrera, but it is in small quantity and was produced at the eruption of the Forgia Vecchia. It is a first class grey pumice and fetches from 600 to 750 lire the ton, and does not so easily break as that of Campo Bianco. Also at Vulcano a grey pumice is found but the presence of included crystals render it useless for commercial purposes. At Castagna a commoner pumice is obtained called *Alessandrina*, of which brick shaped pieces are made and used for smoothing oil-cloth.

As we quitted the port of Lipari on our return to Messina, the narrow strait dividing that island from Vulcano, recalled the legend which recounts that these two islands were once joined and that continual and frightful eruptions of Vulcano compelled the inhabitants to supplicate the assistance of S. Bartolomeo, who thereupon came down from the clouds with a big knife and divided at one cut Lipari from the turbulent Vulcano.

It was nearly night when we were steaming fast away, leaving this weird and strange land behind when a tremendous explosion from Vulcano occurred and as the gigantic dust column rose it cast its long shadow across the sea. Each bale of dark smoke was tinged with gold from the setting sun. It seemed the farewell salute of Titan in honour of our visit. Vulcano saluted us thus, roaring and glowing, whilst on our part we enthusiastically applauded this final demonstration of volcanic energy.

(1) That is the vesicles have been pulled out in one direction.



CHAPTER V.

HERMO-MINERAL

AND

GAS SPRINGS

OF

SUJO

BY

Dr. H. J. JOHNSTON-LAVIS

That part of the Roccamonfina volcanic pile known as the Monte Cortinella or Monte la Frascara which is the analogue of Monte Somma of the Vesuvian volcanic massif, slopes down and away from the crater towards the W. Its toe abuts against the steep declivities of a range of calcareous hills so as to form a rather narrow gorge through which flows the turbulent Garigliano. This valley or more correctly gorge is known as the Valle di Sujo from a small village and ruined feudal castle that caps a limestone eminence and guards its southern extremity.

Its length is about 8 km. and the Garigliano, in its course

(1) A local tradition attributes these rapids to large blocks of stone thrown in by the inhabitants to prevent the ascent of the Saracens in their marauding expeditions.

through it, falls about as many metres though in a step like fashion, in consequence of which the rapidity of the flow is very great and at certain steep parts distinct rapids are formed. (1) Besides these, the valley possesses several other orographical and geological characters well worthy of attention. Its western side is constituted by the gentle slope of the volcanic flanks of the early great cone of Roccamonfina, composed chiefly of extensive lava flows of Leucite and Leucotephrite with less important and more recent Trachytes and Leucitophyres, together with various tuffs and other fragmentary volcanic materials.

At a few points close down to the river, coarse grit-stones and conglomerates of a very heterogeneous nature, crop out and at one point near the spring of the Acqua Ferrata (Iron water) several parallel, long, lofty tunnels have systematically been cut into the mountain side. The entrance to some of these have been stopped up, but the chambers are accessible by the cross passages joining them some distance in. None of the inhabitants of the neighbourhood are able to give any information regarding their origin, but numerous fables are springing up regarding them. My friend Dr. L. Sambon, myself and my son Marcus are probably the first who have explored them in recent times, an undertaking not difficult but very unpleasant from the insupportable odour arising from the abundant deposits of guano of bats, who in thousands inhabit these caves. These excavations are undoubtedly of the nature of quarries as proved by the partly or entirely detached or worked blocks to be seen at the working faces at the extremities of some of them. Their shape is identical with similar quarries in the tuff of Naples, that is to say a high lanceolate arch slightly truncated at the top. The amount of material extracted is sufficient to have built a large town, though none such exists, actually or in ruins, in the vicinity, and therefore we must conclude that the materials were carried to the neighbouring river banks and floated down to Minturno or else, where when required. Some of the numerous feudal Castle towers of the neighbourhood are pointed if not built of a similar material. Certainly these quarries must be referred to medieval times or might even belong to the Roman period, though the neighbouring baths of that epoch are chiefly constructed of brick and tuff.

But to return to our main subject — the volcanic slopes are carved out into radiating ridges and valleys as usual in long extinct volcanoes, which are now covered by rich fields and olive plantations low down, and chestnut woods near the summit,

but the flora always shows distinct indications of the volcanic nature of the soil rich in potash and phosphates.

The western side of the gorge presents quite different characters. It is composed principally of the usual fine-grained dense crystalline limestone of the region, probably of cretaceous age, which constitutes steep precipitous slopes of from 200 to 250 m. high, in most places thickly covered by ilex trees and bushes, myrtles, prickly oaks, etc. characteristic of the poor and scarce limestone soil, which is also indicated by the absence of fields or gardens. In fact the contrast between the two sides of the gorge is most striking, at the same time adding to the variety and beauty of the landscape. As on the eastern bank of the Garigliano we find small inliers of sedimentary deposits so on the western bank we encounter patches of volcanic rock. This, I believe, is not a direct derivative from Roccamonfina but simple remnants of that great deposit of fluoriferous dust that was ejected from near the Lago d'Agnano and spread over the whole Campanian plain, and far over the mountains that form its boundaries. This dust was eventually washed down into the depressions where it attains its greatest thickness forming taluses at the foot of the hills. Where these latter consist of limestone, the loose fragments of that rock that have been carried down with the wash of rain and mixed with the dust have undergone the usual fluoriferization and silicatization that we meet with in the resulting tuff in all parts of the region of its distribution. This dust eventually consolidated into a compact, sonorous, pipernoid tuff, very suitable for building purposes. The pipernoid structure due to the presence of fragments of black scoria is very poorly marked in the neighbourhood of Sujo and Roccamonfina as the distance from the eruptive centre was such as to allow only the grey dust and very small fragments of scoria to reach so far. This tuff forms a thick mantle on the lower slopes of Roccamonfina, where the fluoriferized limestone fragments are absent but near the Stabilimento delle Quattro Torri this tuff is rich in those inclusions, which can be well seen in the pits from which the stones for that building were obtained and where the tuff abuts against the limestone hill.

The steeper inclination of the western side of the valley is due in great part to the constant pushing forward of the toe of the eastern slope, originally from lava flows, etc. and later from the constant wash down of the abundant loose materials from the volcanic flanks. This of course has tended to shelve the Garigliano

against the limestone, which being more soluble and less resistant than the lavas, has tended to be undercut.

It is along the foot of this western valley side that the larger part of the numerous mineral springs and gas exhalations take place. It may be that the gorge of the Garigliano is a line of faulting, as suggested by Sig. Moderni, along which the springs issue, but the probable cause is that the toe of the Roccamonfina volcanic pile is lower here than at any other part of its circumference, and therefore it is here that the subterranean drainage level reaches the surface. No doubt many of these springs might flow out at a higher level but are impeded by the comparatively impermeable tuffs, whilst they find a facile passage at the junction of the latter with the easily soluble limestone. There are, however, several other springs around the foot of the volcano as at Francolisi, Teano, Riardo, etc. but as these issue at a higher level they are less voluminous, less mineralized and colder. The north and north east toe of the volcanic pile possesses hardly any springs that can be considered mineral, since it is here that the highest levels are reached.

In connection with this is a curious absence of any important alluvial deposits along the sides of the valley, and also its narrowness in proportion to the strength and volume of the Garigliano. In the next place we find the whole valley of the Liri (name of the Garigliano before it enters the Valle di Sujo, lined by abundant lacustrine deposits which indicate its ancient lake like character. These facts have led Ferrero and others to doubt the present course of the Garigliano to be other than quite recent. It is supposed that the ancient lake emptied itself on the other side of the volcanic pile near Presenzano where it would have to pass a barrier now 194 m. above sea level at the Tav.^a S. Felice.

It is not unlikely, however, that the original course lay somewhere under the present volcanic massif which was built up in the channel and so compelled the river to seek a course to the right or to the left, as the foot of the volcano was raised first on one side then on another by fresh lavas or tuffs. This, as every one knows, is an exceedingly common occurrence where rivers flow in the vicinity of volcanoes.

We have no evidence of Roccamonfina having been active within the historic period and the general facies of the progress of decomposition of its rocks, which much resemble those of Monte Somma, is such as to lead one to judge of its greater antiquity and as the activity of the latter only doubtfully reached

the very dawn of the historic period, we may safely consider Roccamonfina as prehistoric. In consequence of this, there is good reason to suppose that the great volcanic neck with its subsidiary radial dykes, with possibly separate and smaller canals or necks, have undergone a very considerable amount of cooling, although we know that the process is an exceedingly slow one. These masses of hot rock that traverse and are therefore in contact with the subjacent limestone, react upon and metamorphose it. This change practically consists of replacing by silicic acid the carbonic which escapes in an upward direction where it encounters the percolating waters from above and is in part dissolved by them. The resulting solution will depend on the supply of gas, the depth, and temperature of the rocks and gas. In addition to the carbonic acid, other gases are also concerned and are in part derived from sulphurous impurities of the limestone being metamorphosed, and in part as gaseous exhalations from the cooling igneous magma. This solution will follow the lines of least resistance and attack the rocks it traverses; the leucites and felspars of the old lavas and tuffs will afford potash, soda, magnesia and lithia, the magnetite will afford the iron, and from the limestone, lime, magnesia, etc. will pass into the solution.

The resulting liquid will be more or less cooled in its passage through the colder rocks or by admixture with other water, but from its density it will flow at the lowest level. Where pressure becomes less, some of the dissolved gasses will issue from the ground forming small *mofete* (1) and much more will be disengaged after its appearance at the surface, as is well illustrated by the Grande Inferno close to the exit of the cold Sorgente di Acqua Sulfurea (Plate XVI). Besides these, hot and cold gases will reach the surface at variable temperatures and pressures so as to constitute solfataras, soffione, etc.

As we follow the north and eventually the west bank of the Garigliano when we approach the *scafa* or ferry, beneath a pointed hill on which stands the small village of Sujo overtowered by the picturesque ruined feudal castle, we begin to meet with the springs of mineral waters which form brooks sufficiently large to drive mills. As we ascend the valley it rapidly narrows

(1) By the Italian word *mofete* is understood carbonic acid in such quantities as to form gaseous lakes in wells or other depression in the earth, of which the Grotto del Cane near Naples is a well known example, but which is far surpassed in this region under consideration.

and every now and then we cross a fresh brook, the stones at the bottom of which are of a brilliant white, tinged with a faint yellowish green, due to the deposited sulphur from the decomposing sulphuretted hydrogen of the water. For the same reason the water soon assumes a milky opacity whilst the air in the vicinity smells strongly of the gas. As we round the limestone buttress, other springs are met with, and at one point on the river banks a whitish bare spot is seen marking the site of a gas spring of carbonic acid and sulphuretted hydrogen with deposits of sulphur.

The next point that strikes our attention is a rectangular reservoir lying just beneath the path at the level of, and only separated from the river by a small wall built of loose limestone blocks. If the partly tepid water within has not been disturbed for some hours it assumes a milky bluish colour and is in a constant state of ebullition from the abundant escape of gas. This spring is one of the greatest favourites amongst those who resort to this region; its tonic effects upon the skin and indirectly on the whole organism is most remarkable even after a single bath. We found that after a long days geologizing in the broiling sun, five minutes of this bath had more restoring properties than we had ever experienced from any other kinds, sea bathing included.

But a few paces farther on, we arrive at the sulphur water spring called the Caselle which occupies a somewhat similar position to the last, except that the distance from the river is a little greater, a canal over 2m broad of from 1 to 2m. deep carrying the abundant overflow of water to the Garigliano. The basin of the spring itself can only be compared to a gigantic glass of champagne just being poured out, as can be seen by (Pl. XVI.)

This spring is the favourite drinking water, and certainly deserves credit for being most refreshing and palatable, although containing much sulphuretted hydrogen, the taste of it is very well covered by the pungency of the carbonic acid. Immediately above and to the W. of the path, close to the spring, is a basin shaped depression, at the bottom of which decends a deep hole. The form varies, for on account of people loosing their life here, it is each year filled by the authorities previous to the bathing season but is reopened by the undermining of the river, the neighbouring spring and escaping gas. When only a moderate wind is blowing the whole of this basin is filled by carbonic acid and a little sulphuretted hydrogen gas, which overflows the lowest edge and falls as a cascade down the road, as can be seen by its

extinguishing a lighted match placed near the ground. Around the walls in the deeper hole a thin layer of sulphur is deposited. Numerous lizards, moths, etc. can always be seen lying dead at the bottom. This is locally called the Grand Inferno. At numerous points along the road the limestone is, in part or whole, converted into gypsum by the action of the oxydised sulphur compounds of the mineral exhalations and waters.

Immediately beyond this spot the alluvial plain broadens out to a hundred metres or more, forming one of the widest of its kind within the gorge. Just where the valley again begins to narrow, the Stabilimento delle Quattro Torri has been built, containing over twenty rooms for the accommodation of the bathers. It is to Signori D'Orvè and Cimino syndics of Castelforte and other local proprietors to whom credit is due for this enterprise. The situation is most picturesque and with a little improvement should form the centre of the Spa region. We now enter the narrowest part of the gorge and can hardly walk a hundred paces without encountering either mineral springs or indications of them; a little farther on we come to the Stabilimento della Provincia built over the richest spring, especially in iodine, of the district. Close by are mediæval ruins probably constructed for the same object and but a few hundred yards farther we meet with very extensive remains of Roman *Thermæ*, almost a small town (Pl. XV), which with most laudable energy Sig. Duratorre, the owner, has uncovered at his own expence. Whilst the excavations have been carried on in a very systematic manner, several very valuable hot and cold springs that supplied the baths have been rediscovered. As can be seen by (Pl. XV.) they were very extensive with several large swimming basins, *sudatorii*, as well as small baths. The rooms were lined with Carrara marble and decorated by statues, the uncovering of one of which is shown in the photograph. The numerous lead pipes, stop-cocks and other hydraulic apparatus are remarkable, whilst, the *Thermæ* were traversed (see plate) by a well paved road, a branch from the ancient *Via Domitiana*. At this point the Garigliano was traversed by a bridge, the piers of which are still visible. Unfortunately these ruins will all disappear in a few years in consequence of the metamorphosing action of the mineral waters; the bricks have even lost their red tint and disintegrate into a slate-coloured earth, whilst every kind of stone employed by the builders is more or less corroded and when exposed to weathering rapidly crumbles to pieces.

The actual extent of these baths is not known but what

has already been uncovered is very considerable. It is not unlikely that these springs will prove to be the richest in the district but so far they have not been analysed.

As we proceed further northwards, other springs are encountered but they are cold sulphur waters very similar to the rest, the last of importance being called the *Acqua di Salomone* which drives a mill of that name.

Crossing the river at the ferry (*Scafa di Mortola*) and retracing our steps along the opposite bank of the river, we quit the road just before reaching the point opposite the *Stabilimento Provinciale* and ascend a mountain path to the great tunnel quarries above described and close by enter a narrow gorge, which soon is interrupted by a precipice over which the water, from the mountain above, falls in a small but elegant cascade forming a sylvan scene of rare beauty. Close at hand on our right as we stand and admire the fall we notice an ochre coloured stream that issues under the cliff. On examination we find a small archway or tunnel at the foot of the precipice some 30 or 40 cm. high and of twice the breadth, in which constantly rises a jet of cold iron water with a series of dull bumps and gurgles, forming a small basin from which the overflow runs as a rivulet to join the main stream of the gorge. This water as will be seen by the analysis is a fine specimen of a gaseous chalybeate character, very pleasant to the taste and not overcharged with iron.

Returning to the river banks, we find a bare space amongst the rich vegetation composed of a yellowish earth with blocks of lava, in the middle of which rises a fountain of gas surrounded by a small hollow or basin, which, when filled with water, this latter is kept in a violent state of agitation resembling a small continuous geyser, the column often rising 1m. or more high.

This "soffione" represents an enormous escape of gas which is comparatively cool so that the water is at the most tepid. Close at hand are several "mofete" on a large scale, some of which almost should be considered *Solfatare* besides several warm and cold sulphur waters of great volume.

The mineral waters of Sujo are remarkable for their abundance and especially for their gaseous components. Iodine waters are rare all over the world especially ones as rich as that of the *Stabilimento Provinciale*. Equally important are the springs in their variability of temperature and strength so as to suit them for the most variable applications of drinking or bathing. Their chemical composition can be judged of from the 4 analyses by Prof. Casoria here appended. Another point is the possession of a good iron

water which is of so much use internally combined with baths of sulphur water. Lastly their quantity is practically unlimited for no less than five mills are driven by an equal number of streams of mineral water from springs.

ANALYSES OF SOME OF THE TYPICAL WATERS OF SUJO

PER LITRE	Acqua dello Stabili- mento Provinciale	Acqua Caselle (Posto Ban- cone)	Acqua Caselle (drinking water)	Acqua Ferrata di Catafri
H ₂ SO ₄	0·410646	0·190900	0·112602	0·004463
H ₃ PO ₄	0·007504	0·002533	0·001419	trace
CO ₂	0·611600	0·779790	0·993800	0·718630
SiO ₂	0·053200	0·045000	0·041000	0·198000
I	0·087200	—	—	—
Cl	0·045970	0·046975	0·033300	0·095162
CaO sol. after boiling	0·010080	0·014560	0·012320	0·020840
CaO insol. after boiling	0·506842	0·590640	0·473760	0·041140
MgO sol. after boiling	0·121910	0·129813	0·062237	0·016357
MgO insol. after boiling	0·077398	0·092257	0·087863	0·007463
Al ₂ O ₃	0·006000	0·003000	0·000038	0·017010
FeO	0·000677	0·002700	0·000953	0·027619
MnO	trace	0·001300	0·001000	—
K ₂ O	0·071570	0·064997	0·049798	0·396800
Na ₂ O	0·173169	0·069416	0·129900	0·068670
H ₂ S	0·013650	0·041500	0·458200	—
Dissolved air	—	0·284504	—	0·064660
BaO	}	SPECTROSCOPIC TRACES		
SrO				
L ₂ O				
Organic matter	trace	trace	trace	trace
Solid residue per litre	2·280	1·980	1·400	1·120
Temperature	37° C.	29° C.	27·5° C.	21·5° C.
Sp. G.	1·0029	1·00294	1·00214	1·00014

Prof. CASORIA

The fine air, the beautiful scenery, and the many interesting phenomena and objects of the neighbourhood, combine to render this site one of the most favourable ones for a Spa. Close at hand we have several ruins of cyclopean walls, Roman buildings, feudal castles and other antiquities, and strange freaks of nature, one being a stalactite cave, of great beauty, close to the two establishments. This cave of unknown length we explored for a considerable distance. Its walls are draped by elegant stalactites and calcareous fringed curtains of great beauty.

So far, four hours of diligence and one hour of mule-path rendered this health resort inaccessible to nearly everybody but the local peasantry, some 2000 of which resort to it each season. Nevertheless the salutary effects of the waters have drawn others to it and De Sanctis when Minister signed numerous decrees in a straw hut built against a rock close to the Stabilimento delle Quattro Torri. Now these unfavourable conditions have already in great part disappeared. The railroad to Gaeta will leave passengers at the Station of Castelforte and in half an hours drive will bring one to either of the establishments. It is thus placed within easy and commodious reach of both Rome and Naples.

The only remaining thing required to place this amongst some of the best Spas of Europe is a good hotel and several little baths over those springs intended for such. It is extremely doubtful if Sujo will ever attain widespread renown as a Spa, unless it is organized on a grand scale for the higher class of invalids, as so numerous are second-rate establishments that have already attained eminence that a new rival must far surpass them to draw to itself a multitude of visitors. While Italy is more than well supplied with second rate thermo-mineral stations it is particularly poor, if not entirely unprovided with first-class ones and this is a fine opportunity to endow the country with one at Sujo.

The kind invitation on the part of the provincial council of the Terra di Lavoro to the Geologists' Association to visit Sujo was very gratefully received but time and a pre-arranged program prevented the party from accepting it. Dr. Sambon and myself are both most grateful to Prof. Spatuzzi and Signori d' Orvè, Cimino and Duratorre for kind hospitality and help in our subsequent visit to the locality.





CHAPTER VI.

THE TRAVERTINE

AND THE ACQUE ALBULE

IN THE NEIGHBOURHOOD OF TIVOLI

By Signor PIETRO ZEZI

Mining Engineer and Secretary of the "R. Comitato Geologico" of Italy.

Amongst phenomena of volcanic origin, which may be observed on a grand scale on the mediterranean slopes of central Italy, meriting special attention is the formation of travertine or limestone due to chemical precipitation, and named from the latin *Lapis tiburtinus* or Tivoli stone.

This phenomenon, which in the first owes its origin to volcanic activity, not yet entirely exhausted in this part of Italy, may be met with in various localities of the province of Rome: amongst these the most important for its extent, its position, and its history is that in the vicinity of Tivoli on the plain known as that of the Acque Albule (piano delle Acque Albule) from a very large spring of sulphuro-calcareous water found there.

The relationship which exists between the travertine and so called secondary volcanic action is well known. The gaseous emanations of volcanoes in their major state of activity, such as hydrochloric or sulphurous acids, etc. in proportion as the activity deminishes give place to sulphuretted hydrogen and carbonic acid. The consequence is that subterranean waters circulate

ating in volcanic regions, which are in the last stage of the activity of endogenous forces, as it traverses limestone rocks dissolves them by forming a bicarbonate which subsequently is deposited immediately on coming in contact with the atmosphere, when the bicarbonate is decomposed, with great evolution of free carbonic acid. Such deposits when continued for long periods of time give rise to the formation of beds of travertine; and the locality where this takes place by preference is at the foot of valleys and specially where these spread out forming lacustrine basins.

Such in fact is the condition of the plain in question which was the bottom of an ancient quaternary lake fed by the river Aniene flowing down from Tivoli, and bounded on two sides by the Monti Tiburtini and Cornicolani, composed of liassic limestone, and on the other two sides by pliocene and quaternary deposits of the volcanic tableland of the Campagna Romana. It was in fact in this very lake that besides the waters of the Aniene, there were copious calcareous springs coming from the surrounding high mountains and depositing the carbonate of lime held in solution on the lake bottom.

The remains of such large springs in fact, are to be seen, in the actual Acque Albule and in a few other instances of the kind which appear just in the central part of the old lake, now completely filled by the travertine, and around the edges by the detritus brought down from the surrounding mountains.

The epoch at which the great beds of travertine were formed, was in part contemporaneous with, and in part immediately posterior to, the deposition of the quaternary volcanic tuffs of the Roman Campagna. Nevertheless travertine continued to form at a later date in the higher parts of the basin as this continued to become more contracted in consequence of either the diminution of affluent waters or a freer drainage of the lower valley. However, such, travertine, which we may call recent, occurs to limited extent and furnishes a material which is more cavernous in structure with abundance of incrustated vegetable remains and in consequence less adapted for employment as a building stone capable of being dressed. It is therefore evident that the deeper the point from which the Travertine is taken and the greater the age of its deposition, the purer and more compact it is. Even at the present time the spring of the Acque Albule forms deposits of the so called tartar (*tartaro*) or spongy travertine and the drainage canals would soon become choked were it not for continual cleansing to maintain them in activity.

The geologist who makes a visit in detail to the plain of the Acque Albule will observe that the deposits of travertine there occur in great horizontal beds at relatively different levels forming so many terraces or steps, the lowest of which forms a smaller ring or circle than those that stand at a higher level. One can count several of these more or less concentric circles diminishing in size; they evidently indicate the successive stages lowering of the surface of the water lake of the.

The fossil remains which are found in the travertine above, all denote an exuberance of vegetation on the shores surrounding the lake. Different willows, oaks, elms, beaches and conifers have left numerous imprints of their leaves in the travertine; and land and fresh water shells abound, neither are freshwater crustacea absent, besides tortoises, birds, and numerous remains of mammalia such as horse, deer, sheep, goat, ox, in some cases human bones have even been met with.

As has already been mentioned the only vestige of the ancient calcareous springs is that of the Acque Albule which flows forth near the middle of the grand basin forming a small lake, known as Lago della Regina, of elongated form, 230 m. in circumference and 36 m. in depth. This little lake is always full of limpid water of a dirty azure tint, that is in lively ebullition from the constant escape of gas principally composed of carbonic acid and of sulphuretted hydrogen. The water has a constant temperature of about 22° C. and holds in solution a very considerable quantity of carbonate of lime together with sulphate of lime, chloride of sodium, chloride of magnesium, sulphate of magnesia and traces of oxide of iron.

The water, at first limpid, becomes turbid when exposed to the air and assumes a white milky appearance in consequence of the liberated sulphur, from the decomposed sulphuretted hydrogen, hence its name Acque Albule. Besides the abundant calcareous deposits in the lake there are also there formed little concretions of sulphur which give a yellowish tinge to the calcareous incrustations.

In the same manner little concretionary masses, which remain floating on the surface of the lake, are formed from carbonate of lime surrounding organic matter of vegetable origin.

The outflow of water from the spring is more than 270000 m. cub. per diem, which corresponds to about 314 m. cub. per second, an outflow that is really enormous and is such that it gives rise to quite a little river. The quantity of solids contained

in this water has been calculated at about 700 kg. per diem and therefore more than 300 tons per annum.

Near the Lago della Regina there exists another small lake at a slightly higher level called Lago delle Colonnelle, with a depth of 57 m. and supplied by a spring similar, but much smaller in proportion, to the preceding into which it empties itself by a canal. From the opposite extremity of the principal lake starts a canal about 4 m. broad, known as the Canale dell'Acqua Zolfa, which was constructed by Cardinal d'Este to improve the salubrity of the region. By this canal the water from the two lakes is conducted to the Aniene after a course of about 4 km. and with a total fall of a good 25 metres.

The waters are extensively used for baths and there is a large bathing establishment constructed near the Via Tiburtina, with a railway station on the Rome & Tivoli line. They also, the incline being steep, furnish as a motive power for a saw-mill and a grain-mill. As a consequence of the great velocity of the outflow, the major part of the carbonate of lime together with the suspended sulphur to which, as has been said, its white colour is due, is carried into the Aniene, thence to the Tiber and finally to the sea. It is a difficult matter to calculate the amount of solid matter thus carried into the sea; it may be estimated at 200 tons per annum if we suppose one third to be deposited in the lakes and lost along the road.

In conclusion, a few data relative to the uses of travertine and its quarries may be usefully given.

Of all the materials of the neighbourhood of Rome, the travertine is that which lends itself best to building purposes of importance, both on account of the ease with which it may be worked, for its appearance and durability. Mechanical tests prove it to be one of the most tenacious of limestones.

The *lapis tiburtinus* was one of the most characteristic materials of ancient Roman buildings. Little used in the time of the kings and of the republic on account of the difficulty in working it compared to the volcanic tuff, it was much more extensively used during the empire; amongst some of the principal works that are still to be seen, the Colosseum, the Theatre of Marcellus, the

* This is no doubt due to the absence of vertical cleavage cracks either visible or otherwise, whilst the knitting together in a horizontal plane render it able to resist vertical fracture and surface weathering whilst loose flat slabs can be easily cut. *Ed.*

Ponte, Elio, Temple of Fortuna Virile, the Arch of Drusus, etc. may be mentioned.

The Romans only obtained the travertine from some points along the right bank of the Aniene, in the valley of the Ponte Lucano, at the locality now known as Barco, after a hamlet existing there. The space left by the enormous quantity of material that was removed has been calculated at about 5 or 6 million of cubic metres. There remains near the banks the Aniene an accumulation of detritus forming some small hills as much as 20 m. above the plain of the quarries.

The state of good preservation in which ancient edifices built of travertine remain, demonstrate the valuable qualities of the stone. In consequence it was extensively used for buildings in the middle ages and modern times, particularly in the large churches, *palazzi*, fountains, etc., amongst these may be mentioned the basilica of S. Peters, St. John Lateran, the Trevi fountain, as well as the *palazzo* of the Cancelleria, etc.

The travertine lends itself fairly well to statuary and many examples are to be seen in the fascades of churches and some *palazzi*, in the colonnade of the *piazza* in front of S. Peters, in the large fountains, etc.

The quarries which, till quite recently, furnished nearly all the travertine for medieval and modern construction in Rome were those known as the Caprine and Fosse, both situated laterally and not very distant (from 1 to 2 km.) from the Lago della Regina, the ancient ones of the Barco of the Roman period having been abandoned. It was from the Fosse opened out about A.D. 1500 that the material necessary for the construction of the Basilica of St. Peters was derived.

Of late years, in consequence of the extraordinary increase in building, especially in Rome, particularly for bridges and the embankment of the Tiber, new quarries have been started at the Villa Adriana, below Tivoli, at the eastern extremity of the basin, whilst the great Roman quarries of Barco have been reopened.

The annual total output of the group of quarries at present being worked may be estimated at an average of 4000 cub. m. of which two thirds are employed for buildings in Rome and the rest for the works along the Tiber.

The ordinary price of this material in Rome is 80 Lire It. or about L. 3 , , 0 the cubic metre for blocks not exceeding 1 cub. m., but of course, proportionally higher for blocks of greater volume. When it is cut into slabs of 7 to 10 cm. (or 3 to 4 in.) the price of the cubic metre rises to 180 Lire It. or about

L. 7 ,, 0 ,, 0. The cost of columns and other similar architectural works in a single piece, varies according to the amount of labour necessary and may be considered to average in general 200 to 300 L. It. per cub. m. or about L. 8 ,, 0 ,, 0. to L. 12 ,, 0 ,, 0. For a complete statue of the height of 2 m. the average cost may be put at Lire It. 4000 or Lst 160 ,, 0 ,, 0 . (For further details on these points the following works may be consulted: N. PEL-LATI, *I travertini della Campagna Romana* , Roma, 1882, and L. DEMARCHI, *I prodotti minerali della provincia di Roma*, Roma, 1882.





CHAPTER VII.

BIBLIOGRAPHY

of

THE GEOLOGY AND ERUPTIVE PHENOMENA

OF THE SOUTH ITALIAN VOLCANOES

THAT WERE VISITED IN 1889

AS WELL AS OF THE SUBMARINE VOLCANO OF A. D. 1831.

Compiled by

MADAME ANTONIA F. LAVIS AND D.^R H. J. JOHNSTON-LAVIS

The constant progress of geological and vulcanological research in this interesting region is marked by the appearance of numerous memoirs and notes, many of which are published in proceedings of learned societies and often are overlooked or are unknown to other workers at the same subject. In 1881 the committee of organization of the International Geological Congress undertook the production of a Geological and Paleontological Bibliographical list of Italy. For many unavoidable reasons that list was an imperfect one, besides which during the last ten years a great number of new studies have been published. It was therefore thought advisable to place before the geologists who

visited this region a fairly complete bibliography which may be a requisite should they or others be tempted to study any of the districts. In undertaking this compilation we had little comprehended the difficulties and the very long and tedious work necessary to bring it to a fairly successful termination.

The subject has been divided according to the different volcanic groups, and where a book or memoir describes more than one such, the title is found repeated in the separate divisions concerned. The last district is that of the volcanic group of the Alban Hills, to which we do not pretend to give a complete bibliography for the following reasons. We possess no intimate acquaintance with its literature, nor is it possible to easily divide this one from the volcanic district immediately to the N. of Rome, and finally the ground has been already covered by the important publications of a similar nature by Signor B. Contarini, Prof. R. Meli, Signor P. Zezi and others.

Of Roccamonfina and its neighbourhood we believe this is the first separate list of works referring to that volcano that has appeared.

The region, generally known as the Campi Phlegreæ, is one that is as yet but little understood so that each year numerous additions are made to the literature of a district as classic from a vulcanological as from a historical point of view. Many older publications bearing thereon have been added, so that the list has been much lengthened as well as a considerable number of corrections of errors have been made.

In regard to Vesuvius we cannot do better than quote the words of Comm. L. Riccio as follows. — "The eruptive period that commenced on Dec. 16th 1631 had not terminated when already V. Bove at pp. 47 and 48 of the pamphlet published by Mormile, gave the first list of no less than 56 published accounts on that occasion. A few years after Ferrante Bucca recorded a much more important and numerous catalogue. During the last century various authors considered it of use to publish lists, especially of the 1631 eruption of Vesuvius, as Majone (1703), Lasor a Varea (*Savanarola*) (1713), Morhof (1714), P. G. M. della Torre (1755), Ab. Galiani (1772), Vetrani (1780), Soria (1781), Giustiniani (1793) and Duca della Torre (*Senior*) (1796); and in the present century Scacchi (1847), Palmieri (1859), De Blasiis (1875); and again Scacchi in 1883." To these we may add L. M. Greco, J. Roth the price lists of books by G. Dura, Napoli, 1866, F. Furchheim (1879), and Hoepli, Milan, 1879.

It is however to Comm. L. Riccio that so much is due. In the

first place, his untiring exertions during many years, has resulted in the bringing together of the most complete collection of works generally referring to Vulcanology and Seismology and especially to Vesuvius and the other Neapolitan volcanoes which is now deposited in the rooms of the Neapolitan Section of the Italian Alpine Club. The foundation of this splendid library consisted of about 2000 books and pamphlets belonging to the celebrated French seismologist Alexis Perrey. By Signor Riccio's exertions the number is at present raised to about 7000, amongst which are many valuable manuscripts. Unfortunately this unique library is practically lost, for the difficulties of getting at the books for study are so great that the most diligent is prevented from succeeding. We also owe much to Cav. L. Riccio for searching out manuscripts relating to Vesuvius that are stored in other libraries, and many of which he has had copied or has published with suitable comments. The Vesuvian bibliography published in 1881 is the work of Signor Zezi and contains 650 titles. The list we now present is much more extensive, a considerable portion of which has been obtained from the catalogue of the Alpine Club library.

For bibliographical lists of Etna, we are indebted to P. G. A. Massa, Sartorius Von Waltershausen, Von Lassaulx, and O. Silvestri the latter bringing the lists up to 850 entries. That catalogue however, includes besides the province of Catania, which we here have eliminated, the Lipari Islands, of which we have made a separate list, adding much new material, as also with that of Graham's Island.

No doubt there still remain a considerable number of omissions, and not a few errors and unperfections which we shall be very grateful to have communicated to us, and which will be either utilized by us in some future edition or transmitted to some other competent persons, as future circumstances shall decide.

Abbreviations

(B. N.) Biblioteca Nazionale di Napoli.

(O. V.) Osservatorio Vesuviano.

(C. A.) Club Alpino, Sezione di Napoli.

Where no distinct name of an author or responsible editor is to be found in a publication, it is catalogued under the title of ANONYMOUS where it is arranged according to the actual or

presumed date of its publication. Those works without dates are placed in alphabetical order at the end. The same system is adopted with the different publications of any one author, but when a memoir is written by two or more persons, the title is put at the end of the list of the first author's works.

The lists include also earthquakes where these appear to be of a volcanic nature or limited to the immediate vicinity of a volcanic district. The number of our additions may be judged of, by comparing the catalogue prepared by the International Geological Congress of 1881 with the present.

<i>Int. Geol. Cong.</i>		<i>Present list</i>	
739	{ Lipari Island 119 Grahams Island 28 Etna 880	}	1027
667	Vesuvius		1552
290	{ Campi Phlegræi 539 Roccamonfina 33	}	572
125	Alban Hills.		210
1821	Total		3361

Finally we have to thank Dr. L. Sambon for several additions and help in many ways as also to Prof. F. Borsari. Our thanks are likewise due to Mr. F. Furchheim who has kindly corrected the German and to Conte de la Ville for aid in our bibliographical search.

RECENT

TOPOGRAPHICAL AND GEOLOGICAL

MAPS, CHARTS, PLANS, AND MODELS

OF THE

SOUTH ITALIAN VOLCANOES.

1. CARTA (COROGRAFICA) D' ITALIA — 1:1 000 000, in 7 sheets. 3 editions. 1st in three colours with the mountains shaded in brown and water in blue, 2nd mountains in grey, 3rd without mountain shading. See sheets 3 (part of Alban Hills) 4 (part of Alban Hills, Roccamonfina, Campi Phlegreae, and Vesuvius). 6 (Etna, and Lipari Islands). — *Istituto Geografico Militare Ital.* 1889.
2. CARTA (COROGRAFICA) D' ITALIA — 1:800 000, in 6 sheets. 2 Editions. 1st in three colours as in precedent 2nd Without the mountains shaded. See sheets as in precedent. — *Ibid*, 1889.
3. CARTA COROGRAFICA DEL REGNO D'ITALIA E DELLE REGIONI ADIACENTI — 1:500 000, in 35 sheets. 3 editions. 1st in three colours; 2nd in two colours; 3rd in black, without mountain shading. See sheets 18 (Rome), 24 Naples and Vesuvius, 29 Lipari Islands, 34 Etna. — *Ibid.* 1889.
4. CARTA DELLA SICILIA — 1:500 000, in 1 sheet. In black; mountains shaded. Includes Etna and Lipari Islands. — *Ibid*, 1885.
5. CARTA TOGRAFICA DEL REGNO D'ITALIA — 1:100 000, in 277 photo-engraved sheets, in course of publication (1889). The orography is shown by contour lines of 50 m. as well as by zenith-light shading. See sheets 150 Alban Hills; 160, 161, 171, 172 Roccamonfina; 183, 184 Ischia and Campi Phlegraei; 184 185 Vesuvius; 261, 262, 269, 270. Etna; 244 Lipari Islands. — *Ibid*.
6. CARTA TOPOGRAFICA DEL REGNO D'ITALIA — 1:100 000. Chromolithographic edition in three colours without line shading of mountains. Same divisions as last. — *Ibid.* 1889.
7. CARTA TOPOGRAFICA DEL REGNO D'ITALIA — 1:75 000. Economic edition similar to N.º 5.

8. CARTA TOPOGRAFICA DELLA LOMBARDIA, DEL VENETO E DELL'ITALIA CENTRALE — 1:75 000, in 159 half sheets. Mountains shown G 15, H 15, G 16, H 16 (Alban Hills); — *Ibid.* 1829-1889.
9. TAVOLETTE RILEVATE PER LA COSTRUZIONE DELLA CARTA DEL REGNO D'ITALIA — Part to the scale of 1:50 000 and part 1:25 000. See sheets 150 I-IV (1:25 000) (Alban Hills). 160, 161, 171, 172 I-IV (1:50 000) (Roccamonfina); 183 II, 184 I-IV Ischia and Campi Phlegræi. 184 I-II. 185 III-IV (Vesuvius); 244 I-IV (Lipari Islands); 261, 262, 269, 270 (Etna); All 1:50 000 — *Ibid.* 1873-1879.
10. CARTA TOPOGRAFICA DI ROMA E DINTORNI — 1:100 000, in 1 sheet Similar to N.º 5. Alban Hills. — *Ibid.* 1883.
11. CARTA TOPOGRAFICA DI NAPOLI E DINTORNI — 1:100 000, in 1 sheet Similar to N.º 5. Campi Phlegræi and Vesuvius — *Ibid.* 1885.
12. CARTA TOPOGRAFICA DEL MONTE VESUVIO — 1:10 000, in 6 sheets. Contour map with contours of 5 m. — *Ibid.* 1876.
13. CARTA DELLA PROVINCIA DI NAPOLI E PARTE DELLE CONTIGUE DI CASERTA, SALERNO E BENEVENTO — 1:10 000, in 6 sheets in copper engraving. See sheets 2 (Roccamonfina); 3 (Campi Phlegræi and Vesuvius); — *Napoli*, 1864-1875.
14. CARTA TOPOGRAFICA E IDROGRAFICA DEI CONTORNI DI NAPOLI — 1:25 000, in 15 sheets, in copper engraving. See sheets 8 (Campi Phlegræa); 9 (Vesuvius); 10 (Ischia and Procida). — *Napoli*, 1818-1870.
15. RAISED MODEL OF ETNA AND NEIGHBOURHOOD — 1:50 000 horizontal and 1:25 000 vertical scale, cast in zinc and plated with copper. — *Istituto Geografico Militare Ital.* 1876.
16. RAISED MODEL OF VESUVIUS AND NEIGHBOURHOOD — 1:50 000 horizontal, 1:20 000 vertical scale, cast in zinc and plated with copper. — *Ibid.* 1878.
17. L'ITALIA NEL SUO ASPETTO FISICO, BY CAV. CES. POMBA — 1:100 000 horizont. and vert. Raised map on section of globe. — *Pub. G. B. Paravia e C., Torino, Roma, Milano, Firenze, Napoli*, 1890.
18. CARTA FISICA DELL'ITALIA, BY CAV. C. CHERUBINI — 1:750 000 horizontal, 1:150 000 vertical Raised map. — *Ibid.* 1876.
19. ITALIA; CARTA FISICA, BY ING. D. LOCCHI — 1:200 000. Raised. map. — *Ibid.*
20. ROMA E DINTORNI, BY ING. D. LOCCHI — 1:100 000. Raised map coloured in two editions — 1st physical and political. 2nd geological (Alban Hills). — *Ibid.*
21. NAPOLI E DINTORNI, BY ING. D. LOCCHI — 1:100 000. Raised

- map coloured in two editions — 1st physical and political. 2nd geological. (Campi Phlegræi and Vesuvius). — *Ibid.*
22. ISOLA D'ISCHIA — 1:15 000. Raised map. — *Ibid.*
 23. CARTA IN RILIEVO DELL'ITALIA, BY CAV. G. ROGGERO — 1:2800 000 horizontal, 1:320 000 vertical. Raised map. — *Ibid.*
 24. CARTA GEOLOGICA DELL'ISOLA D'ISCHIA, BY C. W. C. FUCHS. — 1:25 000. — *Ufficio Geologico Ital. Firenze, 1873.*
 25. CARTA DELLE ISOLE PONZA, PALMAROLA E ZANNONE, BY C. DOELTER — 1:20 000. — *Ibid. Roma, 1876.*
 26. CARTA GEOLOGICA DELLA SICILIA — 1:100 000. See sheets 244 (Lipari Islands); 261, 262, 269, 270 and section II (Etna). — *Ibid. Roma, 1890.*
 27. CARTA GEOLOGICA DELLA SICILIA — 1:500 000 — Etna and Lipari Islands. — *Ibid.*
 28. DESCRIZIONE GEOLOGICA DELL'ISOLA DI SICILIA CON UNA CARTA GEOLOGICA, TAVOLE IN ZINCOTIPIA ED INCISIONI, DELL'ING. BALDACCI. — *Ibid.*
 29. CARTA DELLA CAMPAGNA ROMANA E REGIONI LIMITROFE — 1:100 000, in 6 sheets with 1 section. See sheet "Rome,, for Alban Hills — *Ibid.*
 30. SAGGIO DI CARTA GEOLOGICA DELLA TERRA DI LAVORO, BY PROF. G. TENORE — 1:20 000. Includes Roccamonfina. — *Napoli, 1872.*
 31. GEOLOGICAL MAP OF MONTE SOMMA AND VESUVIUS ENTIRELY CONSTRUCTED BY H. J. JOHNSTON-LAVIS, DURING THE YEARS 1880-88 — 1:10 000. with short explanation. 2 Editions one in English the other in Italian. — *Pub. by G. Philip & son. 32 Fleet Street. London, 1891.*
 32. PIANO D'ISCHIA E PROCIDA — 1:25 000 — *Ufficio Idrografico della R. Marina Italiana, 1889.*
 33. CARTA DEL GOLFO DI POZZUOLI — 1:20 000 — *Ibid. 1887.*
 34. CARTA, DALLA GAJOLA A TORRE DEL GRECO (PIANI PORTE GRANATELLO E TORRE DEL GRECO — 1:20 000 — *Ibid. 1885.*
 35. PIANO DELLA RADA DI CASTELLAMMARE — 1:20 000 (*pubblicazione provvisoria* — *Ibid. 1889.*
 36. CARTA DEL MARE JONIO E MAR TIRRENO — 1:1000 000 — *Ibid. 1878.*
 37. CARTA DELLE ISOLE EOLIE — 1:150 000 — *Ibid. 1881.*
 38. PIANO DEGLI ANCORAGGI DI VULCANO, LIPARI E PANARIA — 1:25 000. — *Ibid. 1882.*



IPARI OR EOLIAN ISLANDS

- ABICH H. — Eine Excursion am Crater des Stromboli im Juli 1836. — *Zeitsch. d. Deut. geol. Ges. B, IX, Seit. 392-406. Berlin, 1836. map. 1.*
- ABICH H. — Besuch des Kraterbodens von Stromboli am 25 Jul. 1856. — *Zeits. d. Deutsch. Geol. Gesell. 1856-57.*
- AGATIO DI SOMMA. — Historico racconto dei terremoti della Calabria dell'anno 1638, etc. — *Napoli, 1641, pp. 189.*
- ALEXANDER C. — Practical Remarks on the lavas of Vesuvius, Etna and the Lipari Islands. — *Proceed. Scient. Soc. London, Vol. I. London, 1839.*
- AMICO ET STATELLA. — Lexicon topographicum Siculum, etc. — *Catanae, 1759-60, Vols. III, in 4°. See Vol. III, pt. 1, pp. 45-52.*
- ANDERSON T. — The Volcanoes of the two Sicilies. — *Geol. Mag., Dec. III, Vol. V, p. 473.*
- ANDERSON T. — 1888. — *See Johnston-Lavis.*
- ARAGO F. — Liste des Volcans actuellement enflammés. — *Annu. d. Bur. d. Longit. année 1824, pp. 167-189. (C. A.).*
- ANONYMOUS. — Extrait du « Journal d'Angleterre » contenant une description curieuse de la montagne d'Eole en Italie. — *Journal des Sçavans, 1685, in 12°, pp. 419-420. (C. A.).*

- ANONYMOUS. — Breve descrizione geografica del Regno di Sicilia.—*Palermo, 1787, in 4°, p. 293. See pp. 272 and follow. Isole Eolie, etc.*).
- ANONYMOUS. — Cenni sull'Etna e sulle attuali sue eruzioni, con breve sunto dell'opera del Bar. W. Sartorius von Waltershausen. — ?
- ANONYMOUS. — Vulcani di Europa. — *Il Propagatore delle Scienze Nat. Anno I, Pt. II, pp. 328.*
- BALTZER A. — Eruption von tridimitischen Aschen am Insel Vulcano den 7 sept. 1873.—*Neue Züricher Zeitung, N. 5, 1875. — Referate ans der Naturw. Ges in Zürich den 4 Januar 1875. — Boll. d. R. Com. geol. d'Italia, Vol. VI, pag. 197, Roma, 1875.*
- BALTZER A. — Geognostisch chemische Mittheilungen ueber die neuesten Eruption auf Vulcano und die-producte derselben.—*Zeitsch. d. Deutsch. Geol. Gesell. Berlin, 1875.*
- BLAKE J. F. — A Visit to the Volcanoes of Italy. — *Proceed. Geol. Assoc., London, 1889, Vol. IX, pp. 145-176.*
- BORNEMANN J. G. — Ansichten von Stromboli.—*Zeits. d. d. Geol. Gesells. I, 1842, pp. 696-701, Pl. 4. (C. A.).*
- BORNEMANN J. G. — Sur l'état des volcans d'Italie pendant l'été de 1856. — *Translation of De Perrey from Tageblatt. der 32 Versam. Deutch. Naturf. und Aertze in Wien, 1856, pp. 114-141, Original M. S. pp. 4. (C. A.).*
- BUCCA L. — Le andesiti dell'isola di Lipari. Studio micrografico. — *Boll. Com. Geol. 1885. N. 9 and 10, pp. 16.*
- CAMPI P. — Istoria di Lipari. — (*Cil. par Mongitore and Mercalli.*) *M. S. is in the Ex-convento dei Capucini at Lipari.*
- CHAIX C. — The Past History of Vulcano.—*Bull. Amer. Geogr. Soc.. Vol. XX, pp. 464-469.*
- CHIRONE V. — Le terme di S. Calogero nell'isola di Lipari. — *Napoli, 1880.*
- CIANCIO A. — Ragionamento sulla privativa del Marchese Nunziante nella fabbricazione dell'Allume Vulcanico. — *Napoli? in 4°, p. 60.*
- CLUVERUS PH. — Sicilia antiqua et Insulae adiacentes. — *Lugduni Batavorum, 1723. Also: Thes: Siculae, Vol. I.*
- CORDIER — Rapport sur le voyage de M. Constant Prevost à l'île de Julia, à Malta, en Sicile, aux îles Lipari, et dans les environs de Naples. — *Nouv. Ann. des Voy. 2^{me} Sér. T. X, pp. 43-80, Avril, 1836. (C. A.).*
- CORTESE E. — L'Eruzione dell'Isola Vulcano veduta nel Settem-

- bre 1888. — *Boll. Com. Geol. Vol. IX, pp. 214-223. Roma, 1888.*
- COSSA A. — Su minerali e rocce dell'Isola di Vulcano. — *R. Acc. d. Lincei. Ser. 3^a, An. CCLXXV. Vol. II, 1877-78.*
- COZZA P. — Un incendio sconosciuto del Vesuvio. — *Archivio Stor. Province Napoletane, An. XV. fasc. III, pp. 642-646.*
- CROTTI C. — Viaggio per la Sicilia eseguito nell'anno 1830. Poemetto. — *Napoli, 1830, in fol. pp. 20. At p. 6: Stromboli, Vulcano, etc.*
- DESNOYERS — Notice sur l'île Julia, le Stromboli, les colonnes du temple de Pozzuoli. — *Bull. d. l. Soc. de Géol. 1831, pp. 220.*
- DEVILLE CH. (S. CLAIRE). — Sur quelques produits d'émanations de la Sicile. — *Compt. Rend. Vol. XLIII. Paris, 1856.*
- DEVILLE CH. (S. CLAIRE) — Sur la nature des éruptions actuelles du Volcan de Stromboli. — *Bull. d. l. Soc. géol. d. France. 2.^e Sér. Tom. XV, pp. 345-362, Paris, 1858.*
- DOLOMIEU (DE) D. — Voyage au îles de Lipari fait en 1781. — *Paris, 1783, in 8^o, pp. VIII, + 208.*
- DONATI. — Notice sur l'île de Stromboli. — *Bull. d. l. Soc. de Géol. d. France, T. I, pp. 242-245. 1831. (C. A.).*
- FERRARA F. — Campi flegrei della Sicilia e delle isole che le sono attorno. Messina, 1810. — *Atti d. Acc. Gioenia, Ser. 1^a, Vol. II, Catania, in 4^o, fol. 2, pp. XIX + 424, maps.*
- FOUQUÉ F. — Voyage aux îles Eoliennes. — *Compt. rend. d. l'Ac. d. Sc. Tom. LX, pp. 1185; Tom. LXII, pp. 616 et 1366. Ann. d. Mission scient. et litt. 2^a Ser. Tom. III, pp. 165. Paris, 1865-1867.*
- FUCHS K. — Vulkane u. Erdbeben. Leipzig 1877. — *In French: Les Volcans et les tremblements de Terre, Vol. I, Paris, 1866. (Des Lipari, pag. 215)*
- FULCHER L. W. — A visit to the Lipari Islands and Mount Etna. — *Journ. of the City of London College Science Soc., N.º 16, April, 1890, pp. 9.*
- FULCHER L. W. — Vulcano and Stromboli. — *Geol. Mag., Dec. III, Vol. VII, 1890, pp. 347-353.*
- GALVANI D. — Memoria geologica e mineralogica su le Isole Eolie classificazione de' prodotti vulcanici delle medesime. — *Nuovi Ann. d. Sc. Nat. d. Bologna, T. VI, 1841, pp. 18, in 8^o. (C. A.).*
- GENOVESI. — Sull'acque termo-minerali e sulla Grotta di Lipari, 1879. — *Idrol. Med. del dott. Chiminelli. Fasc. XIV, 15. ottobre nov. 1880, pp. 94-95.*

- HAMILTON W. Observations on M. Vesuvius, M. Etna and other Volcanoes of the two Sicilies. — *London*, 1772.
- HAMILTON W. — Campi Phelegrei; observations sur les vulcans des Deux Siciles (French and English) — *Naples*, 1776-79, in fol., col. pl. 54.
- HOFFMAN F. — Ueber die geognostische Beschaffenheit der Liparen. — *Poggd. Ann. Bd. XXVI, Seit. 31 u. folg. 1832*, in 8°, pp. 88, pl. 4.
- HOFFMAN F. — Mémoire sur les terrains volcaniques de Naples, de la Sicile, et des îles de Lipari. — *Bull. d. l. Soc. géol. de France, Vol. III, 1833*, pp. 170-180
- HOUEL J. — Voyage Pittoresque des Isles de Sicile, de Malte et de Lipari. — *Paris*, 1782, Vol. IV in fol. Numerous rich engravings.
- HOUEL J. — Reisen durch Sicilien u. Malta etc.. übersetz t. v. J. L. Heerl, mit Kpft. — Vol. I-IV, *Gotha*, 1797-1809, in 8°.
- IDDINGS P. AND PENFIELD S. L. — Fayalite in the obsidian of Lipari. — *Amer. Jour. Sc. Vol. XL, 1890*, pp. 75-78.
- JERVIS G. — Tesori sotterranei dell' Italia. — 4 Vols. in 8°, *Torino*, 1874-1888, numerous plates.
- JOHNSTON-LAVIS H. J. — The island of Vulcano and Stromboli. — *Nature*, Vol. XXXVIII, pp. 13-14. *London*, 1888.
- JOHNSTON-LAVIS H. J. — The Recent Eruption at Vulcano. — *Ibid.* p. 173.
- JOHNSTON-LAVIS H. J. — The Eruption of Vulcano Island. — "*Nature*," Vol. XLII, 1890, pp. 78-79.
- JOHNSTON-LAVIS H. J. — The Conservation of Heat in Volcanic Chimneys. — *Brit. Assoc. Reports*, 1888, pp. 2.
- JOHNSTON-LAVIS H. J. — The State of the Active Sicilian Volcanoes in September 1889. — *Scottish Geograph. Mag.*, Vol. VI, N.º 3, March 1890, pp. 145-150.
- JOHNSTON-LAVIS H. J. — Further Notes on the Late Eruption of Vulcano Island, — "*Nature*," Vol. XXXIX, 1889, pp. 109-111
- JOHNSTON-LAVIS H. J. AND ANDERSON T. — Notes on the Recent Volcanic Eruption in the Island of Vulcano. — *Brit. Assoc. Reports*, pp. 3, 1888.
- JUDD W. J. — Contributions to the Study of Volcanoes. — *Geol. Mag. Vol. II, London*, 1876. pp. 1, 56, 145, 206, 245, 308, 348, 388.
- LYELL C. — Principles of Geology. — *London*, Numerous editions. *Principes de Géologie; Traduction Française sur la*

- sixième édition anglaise. Lyon, 1846. (Stromboli. pt. III, pp. 357).
- MALLET R. — The mechanism of the active Volcano of Stromboli. — *Proceed. of the R. Soc. London*. N. 155. 1874. Translated in Ital. by Prof. O. Silvestri, *Bull. d. Vulc. ital. Fasc. VII, VIII, IX, X. Roma, 1876.*
- MARGALLE. — 1866. — See Zurcher.
- MASSA G. A. — La Sicilia in prospettiva. — *Palermo, 1709. 2. Vols. in 4°. Parte I, pp. 12-359, Parte II, pp. 503.*
- MERCALLI G. — Contribuzioni alla geologia delle isole Lipari. — *Atti d. Soc. It. d. Sc. Nat. Vol. XXII, Milano, 1879, pp. 14. (C. A.).*
- MERCALLI G. — Le ultime eruzioni dell'Isola di Vulcano. — *Bull. d. Vulcan, Ital. Ann. IV, p. 28. Roma, 1879.*
- MERCALLI G. — Contribuzioni alla Geologia delle Isole Lipari. — *Atti d. Soc. Ital. d. Sc. Nat. Vol. XXII, Milano, 1879. — Estratto dal Bull. d. R. Comit. Geol. d'Italia, Vol. I, Ser. 2ª, p. 315. Roma, 1880.*
- MERCALLI G. — Natura delle eruzioni dello Stromboli ed in generale dell'attività sismo-vulcanica nelle Eolic. — *Atti d. Soc. It. di Sc. Nat. Vol. XXIV, Milano, 1881, in 4°, pp. 30. (C. A.).*
- MERCALLI G. — La fossa di Vulcano e lo Stromboli dal 1884 al 1886. — *Atti d. Soc. It. d. Sc. Nat. Vol. XIX, Milano, 1886, in 4°, pp. 9. (C. A.).*
- MERCALLI G. — L'Isola Vulcano e lo Stromboli dal 1886 al 1888. — *Atti Soc. Ital. Sc. Nat., Vol. XXXI, Milano, 1888.*
- MERCALLI G. — L'eruzione dell'isola Vulcano. — *Rassegna Nazionale, Ann. X. Firenze, 1889, in 8°, pp. 18.*
- MERCALLI G. — Sopra alcune lave antiche e moderne dello Stromboli. — *Rend. R. Ist. Lombard, Ser. II, Vol. XXIII, fasc. XX. 1891, pp. 11.*
- MINÀ PALUMBO F. — Cenno topografico delle isole adiacenti alla Sicilia. — *L'Empedocle, anno I, fasc. 7 e 8 (Nov. Dec.) 1851, pp. 419-436, 465-492.*
- PALMIERI L. — Intorno ad una recente eruzione nell'Isola di Vulcano ed alla continuazione del terremoto di Corleone. — *Rend. R. Accad. Sc. Fis. Mat. An. XV, Napoli, 1876, p. 123.*
- PAPARCURI S. (1743). — Discorso fisico-matematico sopra la variazione de' venti pronosticata ventiquattr'ore prima dalle varie e diverse qualità, ed effetti dei Fumi di Vulcano. — *Opusc. di Autor. Sic. V, pag. 76-120.*

- PAREIRA A. — Sieben Tage auf den Eolischen Inseln. 1880. — 1881?
- PAYAN D. — Notice sur quelques volcans de l'Italie méridionale. — *Bull. Soc. Stat. Arts Utiles, Sc. Nat. du Départ. d. l. Drôme, t. III, in 8°, 1842, pp. 145-163.* (C. A.).
- PILLA L. — Parallelo tra i tre Volcani ardenti delle Sicilie. — *Atti d. Acc. Gioenia 1837. — Cit. Jahrb. f. Min. p. 347. Stuttgart, 1835.*
- PILLA L. — Sur les îles Eoliennes et sur les localités volcaniques de la Sicile. — *Ann. des mines, 3^a Sér. Vol. XVIII, p. 127. Paris, 1840 (?)*.
- PILLA L. — Osservazioni fisiche sopra il Vulcano di Stromboli. — *Il Lucifero, anno 1°, Napoli, pp. 30, 54, 89, 106.*
- PLATANIA GAET. — Sui proiettili squarciati di Vulcano (Isole Eolie) nell'eruzione del 1888-1890. — *Ann. dell' Ufficio Cent. Meteor. Geodin., Pt. IV, Vol. X, 1891, pp. 7.*
- PLATANIA GIOV. — Éruptions volcaniques aux îles Lipari, du 3 au 6 août 1888. — *La Nature, 16^e ann. Paris, 1888, N. 795, pp. 198-199.*
- PLATANIA GIOV. — Eruption volcanique à l'île Vulcano. — *La Nature, 16^e Ann. 1888. N. 805, pp. 359-363, fig.*
- PLATANIA GIOV. — I fenomeni sottomarini durante l'eruzione di Vulcano (Eolie) nel 1888-1889. — *Atti, Rend. Acc. Sc. Let. Art. Acireale, N. Ser. Vol. 1, 1889, pp. 16, tables 3.*
- PLATANIA GIOV. — Stromboli e Vulcano nel Settembre del 1889. — *Boll. d. Osserv. Meteor. R. Ist. Nautico di Riposto, An. XV, fasc. 9-12, pp. 14, Riposto, 1889.*
- PLATANIA GIOV. — La récente éruption volcanique à l'île Vulcano, 1888-90) — *La Nature, 19^e ann. Paris, 1891, N.° 927. pp. 211-214, fig.*
- PRESTANDREA E CALCARA P. — Breve cenno sulla geognosi ed agricoltura delle isole di Lipari e Vulcano. — *Giorn. di Comiss. d'Agric. e Pastor. per l. Sicilia, 1858.*
- QUATREFAGES DE. — Sur l'état du Cratère supérieur de Stromboli en Juin 1844. — *Compt. Rend. Ac. Sc. Paris, Vol. XLIII, 1845, p. 610.*
- QUATREFAGES DE. — Souvenirs d'un Naturliste, Milazzo, Stromboli. — *Revue des Deux Mondes, Vol. XVII, Chap. IV, Paris, 1847, pp. 120.*
- RAMMELSBERG C. — Ueber die Natur der gegenwärtigen Eruptionen des Vulkans von Stromboli. — *Zeits d. d. Geol. Gesells XI, 2, 1859, pp. 103-107.* (C. A.).

- RICCIARDI L. — Sull'allineamento dei vulcani italiani, etc. — *Reggio-Emilia*, 1887. in 8°, pp. 10, col. map. 1.
- SALINO F. — Le isole Lipari. — *Boll. d. Club. Alp. Ital. Torino*, 1874, pp. 135.
- SALINO F. — Le eruzioni di Vulcano. — *Cosmos, di G. Cera*, 1890, pp. 45-56.
- SAMBON L. — Eolie — *Napoli*, 1891, pp. 60, See also, *Pro Patria for 1890, Napoli*.
- SCACCHI A. — Sabbia eruttata da Vulcano dal dì 11 al 26 gennaio 1886. — *Boll. Oss. Coll. Carlo Alberto, S. II, Vol VI. n.º 8 — Moncalieri*, 1886.
- SCHMIDT G. F. J. — Vulkanstudien. — *Leipzig*, 1874, in 8°.
- SCROPE G. P. — Volcanoes. The character of their phenomena, etc. — *London*, 1862. *Paris*, 1864, *Berlin*, 1872.
- SCROPE G. P. — The mechanism of Stromboli. — *Geol. Mag. N. 126. London*, 1874.
- SECCHI P. A. — Lezioni di fisica terrestre. — *Torino e Roma*, 1867.
- SEGUENZA G. — Dell'arsenico nei prodotti vulcanici delle isole Eolie. — *Eco Peloritano. An. III. Fasc. VII, Messina*, 1856, in 8°, pp. 8.
- SEGUENZA G. — Di certe rocce vulcaniche interstratificate fra rocce di sedimento. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. d. Napoli*, 1876.
- SILVESTRI O. — Fenomeni eruttivi dell'isola di Vulcano e Stromboli nel 1874. — *Boll. d. Vulcan. Ital. Fasc. IX e X, pp. 117. Roma*, 1874.
- SILVESTRI O. — Il meccanismo nel Vulcano attivo di Stromboli. Translation into Italian of R. Mallet. — *Boll. d. Vulcan. Ital. etc. Fasc. VII, VIII, IX, X. Roma*, 1876.
- SILVESTRI O. — Sull'attuale eruzione di Vulcano nelle isole Eolie incominciata il 3 agosto 1888. — *Annali dell' Ufficio Centrale di Meteorologia e Geodinamica, Parte IV. Vol. IX*, 1887, *Roma*, in 4°, pp. 13.
- SILVESTRI O. — Etna, Sicilia ed isole vulcaniche adiacenti, sotto il punto di vista dei fenomeni eruttivi e geodinamici presentati durante l'anno 1888. — *Atti Accad. Gioenia. S. IV. Vol. I. N.º 2. Catania. Annuario Meteor. Anno IV*.
- SILVESTRI O. — L'Eruzione dell'isola di Vulcano. — *Boll. Oss. R. Coll. Carlo Alberto, S. II, Vol, VIII, n.º 10, Torino*, 1888.
- SILVESTRI O. — L'isola di Vulcano ed il suo risveglio eruttivo. — *Nuova Antologia, Vol. XXI, fasc. 11. Roma*, 1889.
- SILVESTRI O. — Sur l'éruption recente de l'île de Vulcano. —

- Comptes Rend. Acad. Sc. T. CIX. 6, Paris, Août, 1889, pp. 3.*
- SILVESTRI O., CONSIGLIO PONTE S., SILVESTRI A. — Sulla attuale eruzione scoppiata il dì 3 Agosto 1888 all'Isola Vulcano nell'arcipelago Eolie (Sunto). — *Bull. mens. Acc. Gioenia d. Sc. nat., Nuova serie, fasc. VIII, Catania, 1889.*
- SILVESTRI O. E ARCIDIACONO S. — Etna, Sicilia, ed Isole Vulcaniche adiacenti, sotto il punto di vista dei fenomeni eruttivi e geodinamici durante l'anno 1889. — *Boll. Mens. del Osserv. Cent. di Moncalieri, Ser. II, Vol. X, N.º 2, Febbraio 1890.*
- SOMMA DI AGATIO. — V. Agatio di Somma.
- SPALLANZANI L. — Viaggi alle due Sicilie e in alcune parti dell'Appennino. — *Pavia, Vol. I-IV, 1792. Also in German. Bd. I-VIII. Leipzig, 1794-96.*
- SPALLANZANI L. — Travels in the Two Sicilies and some parts of the Apennines. — *Translated from the Original Italian. — 4 vols. with 11 plates. London, 1798.*
- STAGNO S. F. — Ragionamento sopra il nascimento dell'isola di Vulcano. — *Opusc. di Autori. Sic. Vol. II, in 4º, pp. 93-121, Palermo, 1759, in 12º.*
- STOPPANI A. — Corso di Geologia. — *Vol. I-III Milano, 1873 (Lipari Isles etc. Vol. I, pp. 680).*
- STRUEVER. — Ematite di Stromboli. — *Atti Accad. Lincei, S. IV, Vol. IV, Fasc. 9º, p. 626.*
- TACCHINI P. — Sulle attuali eruzioni di Vulcano e Stromboli. — *Rendicont. R. Accad. Lincei, S. IV, Vol. V, 2º sem. Roma.*
- THOMAS T. H. — A visit to the Lipari Isles and Etna. — *Trans. Cardiff Naturalist's Soc. Vol. XXII, pt. 1, 1890, pp. 16.*
- TROVATINI G. M. — Dissertazione chimico-fisica sull'analisi dell'acqua minerale dell'isola di Vulcano nel Porto di Levante detta volgarmente l'acqua del Bagno. — *Napoli, 1786, in 4º. (B. N.).*
- VARENIUS B. — Geografia generalis, in qua affectiones generales telluris explicantur. (Lib. I. Cap. X: on the island of Vulcano and Etna). — *Amstelodami, 1664.*
- ZURCHER AND MARGALLE. — Volcans et tremblements de terre (Etna et Stromboli). — *Hachette et Cie. Paris, 1866.*



RAHAM'S ISLAND
ISOLA FERDINANDEA
OR
ISOLA GIULIA

ANONYMOUS. — Breve ragguaglio del novello vulcano. — *Effemer. Scient. e Letter. per Sicilia*, T. I. Palermo, 1832, in 8^e, pp. 31, pl. 1. (C. A.).

ANONYMOUS. — Réapparition de l'île Ferdinandeia (ou Julia) dans la Méditerranée. — *Bull. Soc. Géog. France*, 2.^{me} sér., T. I, N. 1, 1834, fol. 100. (C. A.).

ARAGO F. — Considération sur la manière dont se forma dans la Méditerranée, en Juillet 1831 une île qui a été tour à tour appelée Ferdinandeia, Hotham, Graham, Nerita, et Julia. — *Compt. Rend. Acad. Sc. Paris*, T. IV., pp. 753-757. (C. A.).

BERGHAUS. — Annalen (Insel Julia). — Bd. IV, Seit. 365 u. Bd. V, Seit. 124, N. 198. — *Same in French: Ann. d. Sc. Nat. Vol. XXIV, pag. 103, Paris.*

CAPOCCI E. — Un nuovo vulcano in Sicilia. Dialogo. — *Il Propagatore delle Sc. Nat. Napoli*, 1847-48, Pl. 1, pp. 185-186.

CORDIER. — Rapport sur le voyage de M. Constant Prevost à l'île de Julia, à Malta, en Sicile, aux îles Lipari et dans les environs, de Naples. — *Nouv. Ann. des Voy. 2nd série*, T. X, p. 43-80, Avril 1836. (C. A.).

DAUBENY C. — Note on a paper by J. Davy entitled: Notice of

- the remains of the recent volcano in the Mediterranean. — *Phil. Trans.* 1833. pp. 545-548. (C. A.).
- DAVY AND DAUBENY. — Account of a new Volcano in the Mediterranean. — *London, Paris, 1831, in 4.^o*
- DAVY H. — Isle of Julia. — *Philos. Trans. Part. I, pag. 143, and Part. II, pag. 237. London 1833.*
- DAVY J. — Further Notice of the New Volcano in the Mediterranean. — *Phil. Trans.* 1832, pp. 251-254. (C. A.).
- DAVY J. — Notice of the Remains of the Recent Volcano in the Mediterranean. — *Phil. Trans.* 1833, pp. 143-146. (C. A.).
- DAVY J. — Some Remarks in Reply to Dr. Daubeny's Note on the Air Disengaged from the Sea over the Site of the Recent Volcano in the Mediterranean. — *Phil. Trans.* 1834, pp. 551-554. (C. A.).
- DESNOYERS. — Notice sur l'île Julia, le Stromboli, les colonnes du temple de Pozzuoli. — *Bull. d. l. Soc. de Géol.* 1831, T, II, pp. 238-242.
- FUCHS K. — Vulkane u Erdbeben. — *Leipzig, 1875. French edition: Les Volcans et les Tremblements de Terre. Vol. I. Paris, 1866. (Isola Ferdinandea, pp. 220).*
- GELCICH E. — Die Insel Ferdinandea. — *Deutsche. Rundsch. f. Geogr. u. Statistik, Vol. VIII, pp. 225-228.*
- GEMMELLARO C. — Relazione de' fenomeni del Nuovo Vulcano sorto dal mare fra la costa di Sicilia, e l'isola Pantelleria nel mese di luglio 1831. — *Atti dell'Accad. Gioenia Sc. Nat. Catania Vol. VIII, pp. 271-298. Catania, 1831, in 8.^o, pp. 48, Appendix, pp. XXIV, pl. 11.*
- GRAVINA C. (PRINCIPE DI VALSAVOYE). — Poesie. La eruzione del Vulcano sotto-marino tra Sciacca e Pantelleria nel luglio del 1831. Sonetto. — *Catania, 1834, in 12^o, pp. 72. See p. 11. (B. N.).*
- HOFFMANN F. — Intorno al nuovo vulcano presso la città di Sciacca. Lettera al Duca di Serradifalco. — *Giorn. d. Sc. Lett. ed Arti. N. 101. Palermo, 1831.*
- MAZZOLLA B. — Descrizione dell'isola Ferdinandea al mezzogiorno della Sicilia. — *Napoli, 1831, in 12^o, oblong, pp. 4, pl. 8. Other Editions. (C. A.).*
- PILLA L. — Phénomènes volcaniques récents dans un des points de la mer qui baigne les côtes de la Sicile. Lettre à Mons. Arago. — *Compt. Rend. Acad. Sc., T. XXIII, Paris, 1846, pp. 988-990. (C. A.).*
- PREVOST C. — Observations sur le nouvel îlot volcanique qui s'est

- formé en juillet 1831 dans la mer de Sicile. — *Bull. Soc. Geol. France. t. II, 1831, pp. 32-38.* (C. A.).
- PREVOST C. — Description de l'île volcanique sortie récemment du sein de la Méditerranée. — *Nouv. Ann. des Voyages, série 2, T. XXII, 1831, pp. 288-303.* (C. A.).
- PREVOST C. — Introduction au rapport fait à l'Académie Royale, des Sciences sur le voyage à l'île Julia en 1831 et 1832. — *Paris, in 8°, pp. 47.* (C. A.).
- PREVOST C. — Notes sur l'île Julia pour servir à l'histoire de la formation des montagnes volcaniques. — *Mém. Géol. Soc. France, T. II, pp. 91-124, pl. 3.* (C. A.).
- RICCO A. — L'île Ferdinandea, le soleil bleu et les crépuscules rouges de 1831. — *Compt. Rend. Ac. Sc. Paris, Vol. CII, pp. 1060-1063.*
- RUSSO FERRUGGIA S. — Storia dell'isola Ferdinandea sorta nella costa meridionale della Sicilia. — *Trapani, 1831, in 4°, pp. 58.* (C. A.).
- SAINT-LAURENT DE. — Détails sur l'île volcanique nouvellement apparue dans la Méditerranée. — *Bull. Soc. Géol. t. XVI, N.° 102, 1831, pp. 185-188.* (C. A.).
- SMYTH W. H. — Some Remarks on an Error respecting the Site and origin of Graham's Island. — *Phil. Trans. 1832, pp. 255-258, pl. 1.* (C. A.).





ETNA

ABICH H. — Vues illustr. des phénomènes géologiques du Vésuve et de l'Etna, etc. — *Paris, 1837.*

ABICH H. — Vulkanische Phaenomene am Aetna. — *Briefl. Mitth. Jahrbuch f. Miner. Geogn. u. Geol. Seit. 551, Stuttgart 1839.*

ABICH H. — Erläuternde Abbildungen der geol. Erscheinungen beobachtet am Vesuv u. am Aetna in den Jahren 1833 und 34. — *Berlin, 1837. Braunschweig, 1841 (text in French and German) in fol. pl. 10.*

ABICH A. — Geol. Beobachtungen über die Vulkan-Erscheinungen — V. Bd. Lief. I. Ueber die Natur und den Zusammenhang der vulkanischen Bildungen. *Braunschweig, 1841.*

ABICH H. — On some Points in the History and Formation of Etna. — *Quart. Journ. Geol. Soc. Vol. XIV, 1858. (C. A.).*

ABU-HAMID DA GRANADA. — In the « Biblioteca Arabo-Sicula » by Amari. — (*Pag. 74. Erupt. of XII century.*)

ACARIUS DE SÉRIENNE. — Dissertation sur le mont Etna. — *Paris MDCCXXXVI, in 12°, pp. 179-223. (C. A.).*

ACARIUS DE SÉRIENNE. — L'Etna dep. Cornelius Severus et les sentences de Publius Syrus. Traduit en français avec des remarques des dissertations critiques, historiques, géographiques. — *A Paris chez Chaubert et Clousier, MDCCXXXVI, in 12°, 2 maps, pp. 358. (C. A.).*

- AELIAN. — (*συνμικτος ιστορια*). — in *Stobaeus Flor.* 78-39. (*Erupt. of 693. B. C.*).
- AESCHYLUS. — Prometheus. — (*Erupt. of 364. B. C.*).
- ALBERTI L. — Descrizione di Sicilia. — (*Cit. by Massa*).
- ALESSI G. — Elogio del cav. Gius. Gioeni. — *Palermo, 1824, in 4°.* (B. N.).
- ALESSI G. — Storia critica delle Eruzioni dell'Etna. Otto discorsi. — *Atti d. Acc. Gioenia. Ser. 1^a, Vol. III, pp. 17-75; IV, pp. 23-73; V, pp. 43-72; VI, pp. 85-114; VII, pp. 21-66; VIII, pp. 99-149; IX, pp. 121-216. Catania, 1824-32.*
- ALESSI G. — Sopra gli ossidi di Silicio ed i silicati appartenenti alla Sicilia. — *Atti d. Acc. Gioenia, Ser. 1^a, Tom. V. Catania, 1827.*
- ALEXANDER C. — Practical Remarks on the lavas of Vesuvius, Etna, and the Lipari Islands. — *Proceed. Scient. Soc. London, Vol. I, London, 1839.*
- AMARI M. — Storia dei Musulmani in Sicilia (Erupts. of VII-IX cent. — *I. Biblioteca Arabo-Sicula, pp. 85-218.*
- AMICO C. — Cronologia Universale (Cit. by Ferrara and by Amico in: — *Catana Illustr. T. IV, p. 252, (Unpublished).*
- AMICO V. M. — Catana Illustrata sive sacra et civilis urbis Catanae Historia. — *Catania, 1740, in fol.*
- AMICO V. M. — 2nd edit of Fazellus. — *Catanae, 1749, See Fazellus.*
- AMICO V. M. ET STATELLA. — Lexicon topographicum Siculum, etc. — *Panormi, et Catanae, 1759-60, Vols III, in 4°.* See *Vol. III, pt. 1, pp. 45-52.*
- ANDERSON T. — The Volcanoes of the two Sicilies. — *Geol. Mag., Dec. III, Vol. V, pp. 473.*
- ANDREAE J. L. — De montibus ignivomis dissertatio inauguralis. — *Alldorf, 1710.*
- ANNA A. D'. — Eruption of mount Etna. — *London, June, 1800. A col. transparency on a steel engraving in R. fol. (In the collection of Mr L. Sambon, Naples).*
- ANONYMOUS DI SCIACCA. — (Cit. by Recupero). — (*Erupt. de cendres, 1408*).
- ANONYMOUS. — Scriptores Rerum Sicularum in unum corpus nunc primum congesti. — *Francoforti A.-M. A. Wechel, 1579. (See respective authors.)*
- ANONYMOUS. — A Chronological account of several incendiums or fires of Mt. Aetna. — *Philos. Transactions. Vol. IV, p. 967. London, 1669.*
- ANONYMOUS. — An answer to some inquiries concerning the erup-

- tions of Mt. Aetna, 1669, communicated by some inquisitive English merchants now residing in Sicily. — *Phil. Trans. Vol. IV, p. 1028. London, Sept. 1669.*—*Coll. Accad. T. I, pt. 2 pp. 201-205.*—*Gibelin, T. I, pp. 4-13.*
- ANONYMOUS. — Plan du Mont Etna, communément dit Mont Gibel en l'Isle de Sicile, et l'incendie arrivé par un tremblement de terre le 8 Mars 1669. — *Bibl. Nationale d. Paris.*
- ANONYMOUS. — Relazione dell'incendio di Mongibello dell'anno 1669. — (*Cit. by Massa: Etna*).
- ANONYMOUS. — Relatione (vera) del nuovo incendio della Montagna di Mongibello cavata da una lettera scritta da Tauramina ad un Signore dimorante in Roma. — *Roma and Napoli, 1669, in 12°, fol. 4. (C. A.).*
- ANONYMOUS. — Archivio dei Benedettini in Catania. — *Arca I. Lit. B., pag. 100. (Erupt. 1536, 1682 and others.)*
- ANONYMOUS. — Extrait du Journal d'Angleterre contenant une relation chronologique des embrasemens du Mont Etna. — *Journal des Sçavans, 1683, in 12°, pp. 103-105. (C. A.).*
- ANONYMOUS. — Lagrimoso Spettacolo della misera città di Catania nell'Isola di Sicilia, la quale fu distrutta li 15 Gennaio del corrente anno 1693 da un spaventoso terremoto, etc. — *Viterbo, 1693, in 16°, fol. VI. (C. A.).*
- ANONYMOUS. — Della Sicilia, grand'isola del Mediterraneo, in prospettiva il Mont' Etna, o Mongibello, esposto in veduta da un religioso della compagnia di Gesù. — *Palermo, 1708, in 8°, pp. VIII, 126. (C. A.).*
- ANONYMOUS. — Manuscriptum ex libro in Ecclesia majori Nicholosorum asservato, etc. — (*With notices on the erupt. of 1766*).
- ANONYMOUS. — Relation (an exact) of the famous Earthquake and Eruption of Mt. Etna. — *London, 1775.*
- ANONYMOUS. — Untergang der Stadt Messina. Ingleichen eine kurze Beschreibung von den beiden Feuerspeyenden Bergen Vesuv und Aetna. — ? 1783.
- ANONYMOUS. — Breve descrizione geografica del Regno di Sicilia. — *Palermo, 1787, in 4°, p. 293. (pp. 209-211 l'eruzioni del Mongibello, etc.).*
- ANONYMOUS. — Compendio delle Transazioni filosofiche, ecc. — *Giornale Letterario di Napoli, Napoli, 1793. Vols 112, in 8°, Vol. V, pp. 78-89.*
- ANONYMOUS. — Descrizione della eruzione dell'Etna di quest'anno. — *Gazz. Britannica, N. 73, mercoledì 13 Nov. 1811.*
- ANONYMOUS. — Monte San Simone und die Eruption von 1811.—

Morgenblatt, N. 138. Seit. 551. (Cit. by Hoff. *Geschichte der natürl. Veränderungen, etc.* II, pag. 241).

ANONYMOUS. — Eruption de l'Etna. Poussière rougeâtre transportée d'au-delà des mers en Italie par le vent. — *Bull. Soc. Géog. d. F. T. XIII*, pp. 307-308. June 1830. (C. A.).

ANONYMOUS. — Kurze Beschreibung des Aetnaausbruches im November 1832. Fröb. Notiz. XXXVI. 1833. — *Neu. Jahrb. f. Min. Geogn. u. Geol. Seit. 583. Stuttgart, 1833.*

ANONYMOUS. — Descrizione di Catania e delle cose notevoli dei dintorni di essa. — *Catania, 1841, in 8°, pp. 277.*

ANONYMOUS. — Giornale della presente eruzione dell'Etna. — *Rend. R. Accad. Sc. Fis. Mat. Napoli, T. I, pp. 466-468. 1842-1845*

ANONYMOUS. — L'Etna et ses éruptions. — *L'Univers Illustré, 15 février 1865, pp. 99-100, with 3 figs.* (C. A.).

ANONYMOUS. — Eruption of Etna 1865. — *Am. Journ. Sc. 2nd. Ser. Vol. XL. N.º 118, July 1865, p. 122.* (C. A.).

ANONYMOUS. — Eruzione dell'Etna dell'anno 1879. — *Gazetta di Catania, May and June 1879, 16 numbers.* (C. A.).

ANONYMOUS. — Eruzione dell'Etna del 1879. — *Gazetta di Messina 17 numbers.* (C. A.).

ANONYMOUS. — La fine della eruzione dell'Etna 1879. Disegno e testo sopra comunicazioni di Nicola Lazzaro. — *Illustrazione Italiana. Sem. 2º, pag. 5, Milano, 1879.*

ANONYMOUS. — La salita degli Alpinisti Romani sull'Etna. — Disegni di D. Paolucci, sopra schizzi originali di Fornari e testo di Martinori — *Illustrazione Italiana. Sem. 2º, pag. 123. — Milano 1879.*

ANONYMOUS. — Sulla eruzione dell'Etna del 1879. Tre disegni sopra schizzi autentici del Prof. Orazio Silvestri. — *Illustrazione Italiana. Sem. 2º, p. 5 Milano, 1879.*

ANONYMOUS. — Sulla eruzione di fango a Paternò nelle adiacenze dell'Etna. Disegno e testo sopra comunicazione autentica del Prof. Orazio Silvestri. — *Illustrazione Italiana. Sem. 1º, pag. 113, Milano, 1879.*

ANONYMOUS. — Relazione degli Ingegneri del R. Corpo delle Miniere addetti al rilevamento geologico della zona solfifera di Sicilia, sulla eruzione dell'Etna avvenuta nei mesi di maggio e giugno 1879. — *Roma, 1879, in 4º, pp. 7, map. 1.* (C. A.).

ANONYMOUS. — Relazione della Commissione governativa. Eruzione dell'Etna del 26 Maggio 1879. — *Gazz. Uff. d. Regno Vol. I, 152, luglio 1879. — Boll. d. Soc. Geogr. Ital. pp.*

- 550-60, N. 8, con carta, 1879. — *Boll. d. R. Com. Geol. d'Italia*, Vol. X. Roma, 1879.
- ANONYMOUS. — Chronicon Siciliae complectens accuratam regni Siciliae historiam. — *Thes. Sic.*
- ANONYMOUS. — Vulcani di Europa. — *Il Propagatore delle Scienze Nat. Anno. I, Pt. II, pp. 328.*
- ANONYMOUS. — De gestis Gallorum et Aragonensium. (Cit. by Carrera. — *Mem. Stor. d. Città d. Catania. I, 2, c. 2.*
- APPIANUS A. — Bellor. civil. (Erupt. 34 B. C.). — *Edit. Amstelodami, 1660.*
- APRILE Z. — Cronaca di Sicilia. — *Vol. I, Palermo, 1725.*
- ARABICUS CH. — (Cit. by Carrera).
- ARACRI G. — Relazione della pioggia di cenere avvenuta in Calabria ulteriore il dì 27 marzo 1809. — *Atti d. Acc. Pontan. Napoli, 1810, Vol. I, pp. 167-170.*
- ARADAS A. — Brevissimo sunto della conchiliologia etnea. — *Atti d. Soc. It. d. Sc. Nat. Vol. XII, Fasc. III, Milano, 1869, in 8°, pp. 9. (C. A.).*
- ARADAS A. — Un'abbozzo del panorama Etneo. Discorso dell' A. come Presidente del Congresso dei Naturalisti italiani tenuto in Catania nel 1865. — *Atti d. Soc. It. d. Sc. Nat. Vol. XII, Fasc. III, Milano, 1869, in 8°, pp. 36.*
- ARADAS A. — Sulle variazioni delle acque del golfo di Catania rimpetto al litorale. — *Atti d. Acc. Gioenia, Catania, 1881.*
- ARAGO F. — Liste des Volcans actuellement enflammés) — *Annu. d. Bur. d. Longit. année 1824, pp. 167-189. (C. A.).*
- ARDINI L. — Carta agronomica dell'Etna. This map is not published but can be obtained from the author. — *Catania, 1878.*
- ARETII M. — De situ Siciliae. — *See Bibl. Historica Regni Siciliae Joan. Bapt. Carusii, Tom. I. — Also: Thesaurus Antiquitatum et historiae Siciliae Gravetii et Burmanii Lugduni Batavorum, 1723. (Aetna, eaux minérales, etc.)*
- ARISTOTELES. — περὶ κοσμοῦ. — page 365. (general treatise).
- ARISTOTELES. — περὶ αἰσθητῶν ἀνοσμητῶν διὰ τὸν αἶρα — C. 38, page 832. *Edit. Boeckh. (Erupt. of IV century. (B. C.).*
- AULUS GELLIUS. — Noct. Att. — lib. XVII, cap. 10.
- AURIA DON V. — Storia Cronologica dei Vicerè di Sicilia. 1409-1597. — *Palermo, Coppola, 1797. Pp. 143. Erupt. of 1669, earthquake of 1663.*
- AURIA DON V. — Diario delle cose occorse nella città di Palermo e nel regno di Sicilia 1631-74. — *Bibl. de Marzo, Vol. III and V). Erupt. 1669.*

- AUTORI SICILIANI (Opuscoli di...). — Opuscoli I-XX. — *Palermo 1785-88. (For some, see the respective authors).*
- AZOUR A. — Sulla materia dei fuochi etnei. — *Giorn. d. Litt. in Roma, p. 183, 1676. (Cit. by Massa, Etna).*
- BACCHI A. — Elpidiani, Civis Romani. De Thermis, etc. — 1588. *Venetiis, in fol. fig. (pp. 48-492-1).*
- BACCI A. — De thermis libri septem, etc. — *Venetiis, 1571, in fol. (B. N.). Also in 1588.*
- BACCIO A. — De Thermis, veterum. — *See Grævii Thesaurus antiquit. et Hist. R. Sic. Vol. XII. Ludguni Balavorum, 1783. — Venetiis, 1737, with the indication of the mineral sources of Palernò near Catania).*
- BALDACCIO L. MAZZETTI L. E TRAVAGLIA R. — Relazione sull'eruzione dell'Etna. — *Boll. d. R. Com. Geol. d'Italia, Vol. X, pp. 195. Roma, 1879.*
- BALTZER A. — Wanderungen am Aetna. Sep. Abdr. des Jahrbuchs des Schweiz. Alpen-Clubs. IX Jahrgang. — *Zürich, 1874. (Mit Ansicht auf den Aetna von Nicolosi und topographischer Karte der Val del Bove).*
- BARBAGALLO J. — Descriptio montis Aetnei ignam vomentis 1766 die Aprilis 27 (In hexameter verses). — *Catanae, 1766.*
- BARDI G. — Sommario cronologico. — *(Cit. by Mongitore).*
- BARONIUS (Cardinalis). — Historiae annales. — *Romae 1675, pp. 667-682. (Erupt. 1169, etc.).*
- BARTOLOMEO (DON) A PATERNIONE. — Chronica in monasterio Sanctae Mariae de Licordia Auctore don Bartolomeo a Paternione. — *(Erupt. of XV century.).*
- BASILE G. — Note di fenomeni vulcanici presentati dall'Etna dal settembre 1884 a tutto l'anno 1875. — *Atti d. Acc. Gioenia. Ser. 3^a, Vol. X. 1875.*
- BASILE G. — L'elefante fossile nel terreno vulcanico dell'Etna. — *Atti d. Acc. Gioenia, Ser. 3^a, Vol. XI. Catania, 1876.*
- BASILE G. — Le bombe vulcaniche dell'Etna. — *(Att. Acc. Gioenia Sc. Nat. S. III, Tomo XX). Catania, 1888, pp. 82.*
- BAUDRAND. — Article Etna — *Geographia. Tom. I, (Cit. by Massa),*
- BEAUMONT (DE) E. — Sur la structure et sur l'origine du mont Etna. — *Ann. d. Mines, Vol. IX, Paris, 1836.*
- BEAUMONT (DE) E. — L'Eruption de 1865. — *Compt. rend. de l'Acad. d. Sc. 20 Mars. Paris, 1865.*
- BEAUMONT (DE) E. — Origine et structure de l'Etna. — *In: Mémoires pour servir à une description géol. de la France, Vol. IV, pag. 25-26).*

- BEAUMONT (DE) E. — Carte du relief de l'Etna. — *Ecole d. Mines. Paris.*
- BELLA PRIMA (PRINCIPE) P. — Sopra i Basalti globulari pel Murgio. — *Atti d. Acc. Gioenia, Ser. 1^a, Vol. XIV, 1837.*
- BELLA PRIMA (PRINCIPE) P. — Sopra il terreno di Lognina, Acitrezza e Castello. — *Atti d. Acc. Gioenia, Ser. 1^a, Vol. XV, Catania, 1839.*
- BELLA PRIMA (PRINCIPE P.) — Osservazioni geognostico-geologiche sul poggio di S. Filippo e sui dintorni in Militello. — *Atti d. Acc. Gioenia, Ser. 2^a, Vol. I. Catania, 1844.*
- BELLEVUE (FLEURIAN DE). — Mémoire sur l'action du feu dans les volcans. — *Journ. d. Phys. Vol. LX, pag. 446. Paris.*
- BEMBUS P. — Omnia opera. — *Tom. I-III, Basiliae, 1567.*
- BEMBUS P. — De Aetna, Dialogus. — *Venetis, 1495 and 1530 (erupt. 1494 and preceding ones. — 2^a Edit. Amstelodami, 1703. (B. N.). Also 1818.*
- BENOIT L. — 1870. — *See Aradas A.*
- BERGH TH. — Die Eruptionen des Aetna. — *Philologus, 1873, pag. 138 (Proofs of the erupt. 693. B. C.).*
- BIANCONI G. — Storia naturale dei terreni ardenti, dei vulcani fangosi, etc. — *Bologna 1840, in 8.^o*
- BISCARI E. G. — Memoria sul suolo di Catania. — *Catania, 1771.*
- BISCHOFF G. — Lehrbuch der chemischen u. physikalischen Geologie. — *1^e Auflage, Bonn. 1874, Bd. I-III, — 2^e Auflage Bonn. 1863-66. Bd. I-III. Supplementband herausgegeben von F. Zirkel, darin besonders Cap. XIII, XIV, XV. Ueber Vulkanerscheinungen, Aetnalaven, Schlaken u. s. w.*
- BLAEU CAESIUS (WILLEM JANSZON). — 1571-1638. Atlas major. — *Tom. I-II. 1662. (Cit. by Massa, Etna).*
- BLAKE J. F. — A Visit to the Volcanoes of Italy. — *Proceed. Geol. Assoc. London, 1889, Vol. IX, pp. 145-176.*
- BLASI (DI) G. E. — Storia cronologica (Erupt. of Etna of 1787 to 1842). — *Vol. I, with append.*
- BLESENSIS P. — Cronica manoscritta dei re di Sicilia; epistola 46 ad Richard. (Erupt. 1169. Cit. by Massa and Amico). — *Syracus. Episcop. Parisis 1667.*
- BLUNDUS P. — De Siciliae mirandis. — *I. 3, cap. 20. (Cit. by Massa).*
- BOCCARDO G. — Le terre e le acque dell'Italia. — *Milano, 1865 (Erupt. 1865, p. 49 and follow).*
- BOCCARDO G. — Sismopirologia, terremoti, vulcani e lente oscillazioni del suolo. — *Genova, 1869, (Etna, p. 215.).*
- BOCCONI P. S. — L'embrasement du Mont Etna. — *Paris, 1672.*

- BOCCONI P. S. — Museo di fisica, di esperienze. (Eruption and earthquakes in 1693), — 4° *Tav. I-XVIII, Venetia, 1697.*
- BURIGNY, — Histoire générale de Sicile. — *Vol. II, pag. 4, La Haye, 1745.*
- BURIGNY. — Storia della Sicilia continuata da SCASSO e BORELLO. — *Vol. I-II. Palermo, 1786-94, in 4.° — Also printed separately the: “Descrizione Geografica della Sicilia. „ Palermo, in 4.°*
- BURMANNUS. — Thesaurus Scriptorum Siciliac, Sardiniae, etc. 1723. — *See Graevius.*
- BYLANDT PLASTERCAMP (DE) A. — Théorie des volcans. — *Vols. III, in 8.° With Atlas of 17 pl. in fol. Paris, 1835. (Etna, Vol. II, p. 187 and pl.).*
- CABAEUS. — Meteorologia. — *Vol. I, Tent. LXIII, Qu. II, Romae 1664. (Cit. by Massa, Etna).*
- CAESARIUS HEISTERBACHENSIS. — Illustria Miracula. Erupt. of 1200. — *L. 12, p. 857. 1599, Colon. Agrip. Offic. Birckmannica.*
- CAESII B. — Mutimensis è Soc. Jesu. Mineralogia, sive naturalis philosophiae Thesauri, etc. — *Lugduni, in fol. pp. 16-626-69, (pp. 118-122. Etna, etc.).*
- CAFIERO F. — Eruzione dell'Etna. — *Boll. Soc. Meteor. II.*
- CAFICI I. — Stazione della età della pietra a S. Cono in Provincia di Catania. — *Boll. d. Paleont. Ital. N.° 3-4. 1879.*
- CAJETANI SYRACUSANI P. OCTAVII. — Isagoge in Historiam Siculam. — *Thes. Sicul. Vol. II.*
- CALLEJO Y ANGULO, (DEL) P. — Description de l'isle de Sicile. — 1734.
- CAMILIANO C. — Descrizione della Sicilia. — (*Published in “De Marzo, Opere storiche.” Vol. XXVI.*)
- CAMPAILLA T. — L'Apocalissa, Opuscoli filosofici, etc. — *Siracusa, 1784, in fol. pp. 26-466, pl. 4,*
- CAMPANELLA TH. — (1568-1630). Discorso sull'incendio dell' Etna e del come si accende. — *Palermo, 1738, Milano, 1750.*
- CAMPANELLA TH. — Muticensis dissertatio. — *Cil. by Amico.*
- CAPECELATRO F. — Historia di Napoli. — *Vol. I-II, Napoli, 1724.*
- CAPOCCI E. — Three Memoirs. Catalogo dei tremoti avvenuti nella parte continentale del regno delle due Sicilie posti in raffronto con le eruzione vulcaniche ed altri fenomeni cosmici e meteorici. — *1st M., R. Ist. d. Incoraggiamento d. Napoli. T. IX, pp. 335-378, Sept. 22nd 1859, 2nd M., T. IX, pp. 379-422, 3rd M., T. X, pp. 393-327, 1863. (C. A.).*
- CARAFFA P. — Notucae Descriptio. — *Thes. Sic.*

- CARACCI. — Descrizione di Catania. — 2^a ediz. *Catania*, 1847.
- CAREGA DI MURICCE F. — Etna, Conferenza tenuta presso il Club Alpino di Bologna. — *Bologna*, 1877.
- CAREGA DI MURICCE F. — Il nuovo Monte Etneo (Umberto-Margherita) studiato e descritto dal prof. Orazio Silvestri. — *Rass. d. Alp. Ann. II, N. 1, pag. 7, Rocca San Casciano (Firenze) Marzo, 1880.*
- CARNEVALE G. — Historia e descrizione del regno di Sicilia. — *Napoli, Salviani, 1591.*
- CARRERA P. — Il Mongibello descritto in tre libri nel quale oltre diverse notizie si spiega l'istoria degl'incendii e la cagione di questi. — *Catania, 1636, in 4°.*
- CARRERA P. — Poesie pertinente alle materie di Mongibello, e del sacro vito della gloriosa S. Agatha. — *Catania, 1636, in 8°, pp. 177-203. (C. A.).*
- CARRERA P. — Memorie storiche della città di Catania. — *Vols. II, in fol., Catania, 1639. Thes. Sic. Vol. X.*
- CARRERA P. — Descriptio urbis Catanacae. — *Lugd. Bat. Thes. Sicul. Vol. IX, 1723.*
- CARRERA P. — Aetnae descriptio. — *Thes. Sic. Vol. IX.*
- CARREY E. — L'Etna. — *Extrait du "Moniteur". 1863, fol. XXVIII (C. A.).*
- CARUSO G. B. — Bibliotheca historica regni Siciliae, etc. — *Panormi, 1723.*
- CARUSO G. B. — Memorie storiche (Till 1654). — *Palermo, 1742-45.*
- CASTIGLIONE C. — Panormitani terrae motus descriptio (carmen). — *Panormi, Aiccardo, 1726.*
- BOECKH A. — Corpus Inscriptionum Graecarum (Erupt. 475. B. C.). — *Berolini, 1843. II. pp. 302.*
- BOECKH A. — Edit. Pindar. Pyth. — *Odes. I. p. 224.*
- BOLLANDUS. — Acta Sanctorum. (Erupt. of 252).
- BOLANUS. — De igne actneo. — (*Dissertation lost; Cit. by Amico*).
- BOLTSHAUSER A. — Nouveau Guide de Catane. — *Catane, 1874.*
- BOMARE (DE). — Sopra il Vesuvio ed altri vulcani. Dei Vulc. o monti ignivomi. — *See Anonymous, Livorno, 1775.*
- BONFILII J. ET CONSTANTII. — Messanae descriptio. Aetnae incendium, 1537. — *Pp. 35.*
- BONITO M. — Terra tremante, ovvero continuazione dei terremoti dalla creazione del mondo fino al tempo presente. — *Napoli, 1691, in 4°.*
- BORCH (DE). — Lithographie Sicilienne. — *Rome, 1777.*
- BORCH (DE). — Lithologie et minéralogie Sicilienne. — *Rome, 1778, in 4°.*

- BORCH (DE). — Lettres sur la Sicile 1777. — *Turin*, 1782. — *German by Werther, Bern*, 1796.
- BORMANS (DE). — Collation des 167 premiers vers de l'Aetna de Lucilius junior, avec un fragment manuscrit du XI^e siècle. — *Bull. Acad. R. de Belgique T. XXI, N.º 8*, pp. 258-379. (C. A.).
- BORNEMANN J. G. — Aetnakrater. — *Zeitschr. d. Deutsch. geol. Ges. Bd. VIII, s. 535. Berlin*, 1855.
- BORNEMANN J. G. — Sur l'état des volcans d'Italie pendant l'été de 1856. — *Translation of De Perrey from Tageblatt der 32. Versam. Deutsch. Naturf. und Aertzt in Wien 1856*, pp. 114-141, original M. S. pp. 4. (C. A.).
- BORELLI J. A. — Historia et Meteorologia incendii Aetnaei anno 1669 ac responsio ad censuras Honoratii Fabri contra librum de vi percussiois. — *Regio Julio, 1670*, pp. 162 + VI, 1 pl. 1 map.
- BOSIO G. — Historia Gerosolimitana. — (*Cit. by Mongitore*).
- BOTTONE D. M. — De immani Trinacriae terraemotu idea historico-physica. — *Messanae, 1718, Ital. transl. by Marcello Malpighi*.
- BOTTONE D. M. — Pyrologia topografica, idest de igne dissertatio juxta loca cum eorum descriptionibus. — *Neapolis, 1691, in fol. pp. 40-217, pl. 3. Messanae, 1721*.
- BOURDELOT. — Risposta alle lettere del Boccone. — (*Cit. by Massa*).
- BOURQUELOT J. — Viaggio in Sicilia. — *Bibl. d. Viaggi. Vol. X, Milano, Frat. Treves, 1873*.
- BREISLACK S. — Institutions Géologiques. — *Vol. I-III. Milan, 1818*.
- BRIETH PH. — Annales mundi. — *Venetis, 1692. (Fioranti. Description of the earthquake of 1169)*.
- BROCCHI G. B. — Sulle diverse formazioni di rocce della Sicilia. — *Bibl. Ital. Vol. XII. — L'Iride, Giorn. d. Sc. Lett. e Art. An. I, Tom. II, N. 7, p. 21. Palermo, 1822*.
- BROCCHI G. B. — Osservazioni naturali fatte alle isole de' Ciclopi e nella contigua spiaggia di Catania. — *Bibl. Ital. Vol. X, p. 217*.
- BROCCHI G. B. — Antichità dell'Etna. — *Bibl. Ital. Vol. XXVII, pag. 53*.
- BRYDONE P. — Tour through Sicily and Malta. — *Vol. I, and II. London, 1773, French transl. by M. Demeunier. Amsterdam, 1775, 2 Vols. in 8.º Vol. I, pp. XVI+449, Vol. II, pp. 401. Another edition, Neuchatel, 1776, 2 in Vol. I, in 8.º, pp. 272, pl. 1*.

- BUCH (VON) L. — Zusammenstellung der noch thätigen Vulkane. — *Pogg. Ann. Bd. V. Leipzig, 1827.*
- BUCH (VON) L. — Ueber die Zusammensetzung der Basalt. Inseln u. über Erhebungskratere. — *Abh. Akad. d. Wiss. z. Berlin, 1820. — Gesammelte Schriften, Bd. III, Seit. 15 Aetna. Berlin, 1877.*
- BUCH (VON) L. — Physikalische Beschreibung der Canarischen Inseln. — *Berlin, 1825. Description physique des Iles Canaries, traduite par C. Boulanger. Paris, 1836.*
- BUCH (VON) L. — Ueber Erhebungskratere u. Vulkane. — *Pogg. Ann. Bd. XXXVII. Leipzig, 1836.*
- BUCH (VON) L. — Gesammelte Schriften. — *III. Bd. Seit. 229, u. folg. (Darin der Aetna Pag. 513-16). Berlin, 1877.*
- BUDA J. (LOMBARDO-CATANENSIS). — Vulcania Litholosylloge Aetna in classes digesta. — *Nuova Raccolta. Vol. III, pp. 145-170. Catania, 1789.*
- BUONFIGLIO G. — Historia Siciliana. — *Vol. I-II. Messina, 1738-39.*
- BURGIS. — Lettre du 10 avril 1536 sur la dernière éruption. — (*Cit. by Palgrave.*)
- BURGOS P. A. — Distinta relazione dello spaventoso eccidio cagionato dai terremoti ultimamente con replicate scosse, accaduto a 9 e 11 Gennaro 1693 nel Regno di Sicilia. — *Napoli, 1693, in 4.° (C. A.).*
- BURGOS P. A. — Sicilia piangente su le rovine delle sue più belle città atterrate da' tremuoti agli undici di Gennaio dell' anno 1693, etc. — *Palermo, 1693, in 4.°, pp. 19. (C. A.).*
- BURGOS A. — Descriptio Terrae Motus Siculi anni 1193. — *Thes. Sic. Vol. IX, p. 88 (from Carrera).*
- CASTONE C. — Viaggio della Sicilia. — *Palermo, 1828, in 12°, pp. 3+240, I pl. P. 163 and follow. dell'Etna, etc. (B. N.).*
- CATTANEO L. — L'eruzione dell'Etna del 1879. — *Illustr. Ital. d. Treves. pag. 371. 1° Sem. Milano, 1879.*
- CHIAVETTA B. Abb. Basiliano. — Memoria dell' ultima eruzione dell'Etna accaduta il 27 marzo 1809. — *Messina, 1809.*
- CHIRCHERIO. — Mundus. Subterraneus. — *Vol. I-II. with plan. 1678.*
- CHISARI V. — Breve notizie sulle acque termali di Paternò da lui scoperte. — *Catania, 1736, in 8°, (Cit. by Scina) Prospetto della storia letteraria di Sicilia, V. I, p. 137, Palermo, 1824).*
- CHRIST W. v. — Der Aetna in der griechischen Poesie. — *?, 1888, pp. 50.*
- CICERO M. T. — De natura deorum lib. II, cap. 38, 96. — (*after;*

- Cajetani Siracusani Octavii Isagoge ad hist. Sic. cap. XII, pag. 55.*
- CIMARELLI A. — Risoluzioni filosofiche (at Cap. 12, pag. 104, description of the mineral springs of Paternò.—*Cit. by De Gregorio*).
- CLAUDIANIUS C. — Opus de Raptu Proserpinae, etc. — *Nicolae Bizzi Nobili Bergomensi 2º Editio. Lucae, 1751, pp. 656.*
- CLUB ALPIN FRANÇAIS (Bulletin Trimestriel). — Congrès des Clubs Alpins à Catane en 1880 et ascension de l'Etna. — 3º Trim. Paris, 1880.
- CLUVERUS PH. — Geologia. De creatione et formatione Globi terrestres. — *Lugd. Bat. 1619, in 4º.*
- CLUVERUS PH. — Sicilia antiqua et Insulae minores adiacentes. — *Lugduni Batavorum, 1723, (Also: Thes. Sic. Vol. I).*
- COCO G. — L'Etna. Saggi Poetici. — *Acireale, 1859, in 8º, pp. 90 93 (C. A.).*
- CODEx Diplomaticus Siciliae. (Erupt. 760.A.D.) — *Dipl. CCLXXIV, Panormi, 1743.*
- COGNATUS NOZERENUS (Gilbertus). — De incendio Aetnae Anni MDXXXVI. — (*De Sylva narrationem, pp. 35-39 Basle, in 4º, (small). (C. A.).*
- COLLINI M. — Considérations sur les Montagnes Volcaniques, etc. — *Mannheim, 1781, in 4º, pp. VIII + 61, pl. 1.*
- CONSTANTIUS. — See Bonfilii.
- CONTEJEAN CH. — Une ascension de l'Etna. — *Turin, 1884, in 8º, pp. 14. (C. A.).*
- CONTI C. — Sull'eruzione dell'Etna incominciata il giorno 19 maggio 1886. — (*Boll. Com. Geol. 5-6) Roma, 1886, Vol. VII. pp. 149-156, map. 1.*
- CORNELII S. P. — Aetna et quae supersunt fragmenta. — *Amsterdam, 1703, in 8º, fol. 3, pp. 186, fol. 12 (index), pl. I. see Bembus P., Aetna, Trans. Ital. by Gargiulli, Venice, 1701. (C. A.). Trans. in French. Paris, 1736, in 12º, pp. 8 + 358, pl. 2.*
- CORONELLI P. — Isolarium Atlantis Veneti. — *Erupts. of Etna 1535-1683, Pars, I, Venetii, 1696.*
- COSSA A. — Osservazioni chimico-microscopiche sulla cenere dell'Etna e sulla lava raccolta a Giarre il 2 giugno 1879. — *R. Acc. d. Lincei. Trans. 3, III, Roma, 1879. Boll. d. R. Com. geol. d' Italia, Vol. X, pag. 329, Roma, 1879.*
- COSSA A. — Sur la cendre et la lave de la récente éruption (1879) de l'Etna. — *Compt. rend. d. l'Acad. d. Sc. d. Paris, 1879.*

- COSSENTINI F. — Colpo d'occhio sulle produzioni vegetali dell'Etna. — *Atti d. Acc. Gioenia, Vol. IV, Catania, 1879 ?*
- COVELLI N. — 1873. — *See Monticelli.*
- CREMONENSIS L. (Ludovico Cremonensis). *Annales* 1868. (Erupt. 1570. — *See: Thes. Sic. Cit. also by Alessi.*)
- DAL VERME. — Una escursione al nuovo cratere sull'Etna. — *Boll. Soc. Geogr. Ital., Vol. XI, ser. 2, p. 679.*
- DAUBENY CH. — Sketch of the Geology of Sicily. — *Jameson's Philos. Journ. Vol. XIII, pag. 197 and 254. With geological map. London, 1825.*
- DAUBENY CH. — Description of active and extinct Volcanoes, Earthquakes and Thermal springs. — *With 4 plates, 18 maps and woodcuts. 1st Edit. London, 1826. 2nd Edit. London, 1848.*
- DAUBENY CH. — 1831. — *See Dary.*
- DAUBENY CH. — Die noch thätigen und erloschenen Vulkane; Bearb. von G. Leonard. Cap. XIV. Aetna. — *Stuttgart, 1851.*
- DAUBRÉE. — La Chaleur intérieure du Globe. Conférences populaires faites à l'Asile Impérial de Vincennes. — *Paris, Hachette et C.^{ie}, 1866.*
- DAUBRÉE. — Note accompagnant le Rapport de M. Silvestri, sur l'éruption de l'Etna, des 18 et 19 mai 1886. — *Compt. Rend. Ac. Sc., Vol. CII, pp. 604-607.*
- DAVY H. — On the phenomena of Volcanoes. — *Phil. Trans. pag. 241-50, London, 1828. — Ann. d. Chim. et d. Phys. Vol. XXXVIII, pag. 133, Paris, 1828.*
- D. C. G. G. — Relazione dell'eruzione dell'Etna nel mese di Luglio 1787, scritta da D. C. G. G., — *Catania, 1787, in 4°, fol. 1, pp. 40. (C. A.).*
- DE LUCA P. — Eruzione dell'Etna in Novembre del 1843 e suoi effetti nell'industria de' Brontesi. — *?, 1844, pl. 1.*
- DELUC G. A. — Nouvelles Observations sur les Volcans et sur leurs laves. — *Journ. d. Mines. Vol. XVI, 1804. — Vol. XX. Paris, 1806.*
- DELUTHO ABBÉ. — L'Etna, poème de Cornelius Severus. Traduction Nouvelle. — *Paris, 1842, in 8°, pp. XXVII+105. (C. A.).*
- DEL VISCIO G. — Il Gargano in mezzo ai moti sismici d'Europa ed alle eruzioni dell'Etna. — *Bull. Soc. Meteor. II. 1888.*
- DENON. — Voyage en Sicile. — *Paris, 1788.*
- DERVEIL. — Voyage en Sicile et Malte. — *Vol. I-II, 3° Mit. Kupfern. Neuschâtel, 1776.*
- DE SAINT-NON R. — Voyage pittoresque à Naples et en Sicile. —

- Paris, 1781-86. — V Vols. Also, 1829, in 8°, Vol. IV, pp. LXXIX + 445, 572, 514, 576 and atlas. (C. A.).*
- DEVILLE CH. (SAINTE-CLAIRE). — Relation sur l'Etna en Archiac H. D. Histoires des progrès de la géologie. — *Vol. I, pp. 579. Paris, 1847.*
- DEVILLE CH. (SAINTE-CLAIRE). — Sur les produits des Volcans de l'Italie méridionale. — *Compt. Rend. Vol. XLII. Paris, 1856.*
- DEVILLE CH. (SAINTE-CLAIRE). — Sur quelques produits d'émanations de la Sicile. Deux lettres à M. Dumas. — *Compt. Rend. Acad. Sc. T. XLI, pp. 889-894. Nov. 19, 1855 et T. XLIII, pp. 359-370, Août 18, 1856. (C. A.).*
- DEVILLE CH. (SAINTE-CLAIRE). — Sur les émanations volcaniques. 2 Pts. Paris, 1856-62. — *Compt. Rend. Acad. Sc. Vol. LXIV. 1857, Vol. LXIX, 1862. — See also le Bull. d. l. Soc. Géol. d. France, Vol. XIV, Paris, 1857...*
- DEVILLE CH. (SAINTE-CLAIRE). — Gaz de la Salinelle de Paternò. — *Ann. d. Chim. et Phys. 3^e Série. Vol. LII, page 51. Paris 1858.*
- DEVILLE CH. (SAINTE-CLAIRE) ET LEBLANC. — Sur la composition chimique des Gaz rejetés par les émanations volcaniques de l'Italie méridionale. — *Paris, 1858.*
- DEVILLE CH. (SAINTE-CLAIRE). — Extrait de deux lettres de M. O. Silvestri sur l'éruption de 1865. — *Compt. Rend. Ac. Sc. juillet 31, Paris, 1865.*
- DEVILLE H. (SAINTE-CLAIRE) ET GRANDJEAN. — Analyse de la lave de l'Etna. — *Compt. Rend. Vol. XLVIII, page 21, Paris, 1859.*
- DIACONO P. (PAOLO DIACONO). — *Historiae Miscellanea. — Basileae, 1565.*
- DICKERT TH. — Relief à couleurs de l'Etna. — *Les couleurs Géologiques d'après la carte de M. Sartorius de Waltershausen.*
- DOGLIONI N. — Anfiteatro d'Europa, in cui si ha la descrittione del mondo celeste, etc., etc., — *Venetia, 1623, in 4°, with portrait, p. 72-1377. (P. 993: Dell' Ethna detto Mongibello e sua historia; P. 694 Del Monte di Somma, e sua historia.*
- DIODORUS SICULUS. — *Eruptions of 475, 425, 394. B. C., Vol. III, pag. 6, Vol. XIV, pag. 59.*
- DOLOMIEU (DE) D. — Mémoire sur les Iles Ponces et catalogue des produits de l'Etna; descript. de l'éruption de l'Etna du mois de juillet 1787. — *Paris, 1788, pl. 2.*
- DOLOMIEU (DE) D. — Sur une éruption de l'Etna. — *Journ. d. phys. Vol. XL, Paris, 1792.*
- DOLOMIEU (DE) D. — Distribution méthodique de toutes les ma-

- tières dont l'accumulation forme les montagnes volcaniques. — *Journ. d. phys. Vol. XLIV, 1794, Vol. XLV, Paris, 1795.*
- DOMNANDO. — Constitution et soulèvement de l'Etna au 10 Octobre 1834. — *Bull. d. l. Soc. géol. d. France, Vol. VI, page 124, Paris, 1835.*
- DRYDEN J. — Voyage to Sicily and Malta, etc. — *London, 1776, in 8.°*
- DURIER C. — L'Etna — *Compt. rend. d. l. réun. d. Clubs Alpins à Genève dans l'Août 1879, Genève, 1880.*
- EICHWALD (VON) E. C. — Beitrag zur vergleichenden Geognosie auf einer Reise durch die Eifel, Tyrol, Italien, Sicilien u. Alger. — *mit 4 Kupft, Moskau, 1851, in 4.°*
- ELIDRIS SHERIFF. — Descrizione della Sicilia, tradotta da Franc. Tardia. — *Opuscoli di autori Siciliani, Vol. VIII, pag. 233, 1788.*
- ERRICO S. — Ode di Mongibello. — (*Cit. by Massa*).
- FALB. R. — Gedanken und Studien über den Vulkanismus, etc. — *Gratz. 1875, Cap. III, Seit, 46, der Ausbruch des Aetna am 29 August, 1874.*
- FALCANDUS H. — Historia de rebus gestis in Sicilia regno, — *Parisii, 1550, in 4.° (copied several times since 1129-1166 under the title: De Calamitate Siciliae) (Earthquake of 1169).*
- FAUJAS DE ST. FOND. — Minéralogie des Volcans. — *Paris, 1784.*
- FAUJAS DE ST. FOND. — Discours sur les Volcans brûlants. — *Vol. I, Fol. Paris, 1778.*
- FAUJAS DE ST. FOND. — Essai de Géologie. — *Tom. I, Paris, 1809.*
- FAYE. — Sur les orages volcaniques. — *Compt. Rend. d. l'Acad. d. Sc. Tom. XCI, pp. 708, Paris, 1880.*
- FAZELLI T. — De Aetna monte et ejus ignibus. — *De Rebus Siculis, Cap. 4th, lib. II, 1558, in 4°, pp. 616 (C. A.).*
- FAZELLUS TH. — De rebus Siculis. — *Decades II, Panormi, 1557, Ibidem 1560. (Also Fazellus in Thes. Sic. Vol. VI, the best edition of the work of V. Amico, Catania, 1749-50, with notes and appendix till 1700) Aetna, and mineral springs, etc.).*
- FAZELLUS TH. — Dell'Istoria di Sicilia tradotta da M. Remigio, data in luce per Martino Lafarina. — *Palermo, 1628.*
- DU PÉROU — Notice sur l'Etna, formation et composition de son massif. Eruption de Février 1865, précédée d'une histoire des anciennes éruptions, etc. — *Catane, 1865.*
- FERRARA F. — Storia generale dell'Etna, etc. — *Catania, 1793, in 8°, pp. XLIV+359, pl. V.*
- FERRARA A. — Memoria sopra le acque della Sicilia, loro natura, analisi e usi. — *Londra, 1811.*

- FERRARA F. — In the almanach « Fa per tutti » (eruption 1811). — *Catania, 1812.*
- FERRARA F. — Storia naturale della Sicilia, compr. la Mineralogia. — 4°, *Catania, 1813.*
- FERRARA F. — Descrizione dell' Etna con la Storia delle eruzioni e il Catalogo dei prodotti. — *Palermo, 1818, in 8°, pp. XVI+256, pl. V.*
- FERRARA F. — Guida dei viaggiatori agli oggetti più interessanti a vedersi in Sicilia. — *Palermo, 1822, in 8°, pp. 304, pl. VIII, (B. N.).*
- FERRARA F. — Campi Flegrei della Sicilia e delle isole che le sono attorno. — *Messina, 1810, in 4°, fol. II, pp. XIX+124, maps. Atti d. Acc. Gioenia, Ser. 1ª, Vol. II. Catania, 1825.*
- FERRARA F. — Della influenza dell' aria alla sommità dell' Etna sopra l' economia animale. — *Giornale di Sc. Lett. ed Arti per la Sicilia, N.º XXVI. Palermo, 1825, in 8.º pp. 17. (C. A.).*
- FERRARA F. — Memoria sopra i tremuoti della Sicilia in marzo 1823. — *Palermo, 1823, in 8°, fol. IV, pp. 51, pl. I; also analysis in Edinb. Journ. of Science, Vol. VI, pp. 362-370, 1826.*
- FERRARA F. — Storia di Catania sino alla fine del XVIII secolo. — *Catania, 1829.*
- FERRARA F. — Sopra l' eruzione dell' Etna, segnata da Orosio nell' anno 122 B. C. — *Atti di Acc. Gioenia, Vol. X, pp. 141-158, Catania, 1833.*
- FERRARA F. — Storia generale della Sicilia. — *Palermo, 1838.*
- FICHERA S. — Acqua minerale di S. Venera di Acireale. — *Relaz. d. Acc. d. Sc. Lett. ed Arti, di zelanti di Acireale, Pag. 37-38. Palermo, 1836.*
- FILOTHEO (DE HOMODEIS) A. — Siculi Aetnae topografia atque eius incendiorum historia. — *Thes. Sic. Vol. IX. Venetiis, 1591, in 4°, fol. III, pp. 56.*
- FILOTHEO (DEGLI OMODEI) A. — Descrizione della Sicilia. — *Manuscript in the Biblioteca comunale di Palermo, printed in the Biblioteca de De Marzo, Vol. XXIV and XXV.*
- FILOTHEO (DEGLI OMODEI) A. — Descrizione del sito del Mongibello, trad. in Italiano. (See Orlandini) — *Palermo, 1811, in 4°, pp. 85.*
- FLEURIAN DE BELLEVUE. — *See Bellevue.*
- FODERA DR. — Extrait de la description de l' Etna de M. F. Ferrara. — *J. de Phys. T. LXXXVIII, pp. 283-289, 364-372. 1819 (C. A.).*

- FOUQUÉ F. — Lava del 1865. — Analisi data nel lavoro di Silvestri. — *Also in Zeitschr. d. deutsch. geol. Ges. Bd. XVII, Seit. 606, Berlin, 1865.*
- FOUQUÉ F. — Rapport sur l'éruption de l'Etna en 1865. — *Archives des Miss. Sc. 2^{me} Sér. T. II. pp. 324-359, Paris, 1865. (C. A.).*
- FOUQUÉ F. — Sur l'éruption de l'Etna du 1^r février 1865; lettres à M. Elie de Beaumont et S^{te}. Cl. Deville. — *Compt. Rend. de l'Acad. d. Sc. de Paris. 20 Mars 1865. T. LX et LXI, pp. 23-25, 31-34, 215, 421-424, pp. 548-555 et 555-556, also pp. 1135-1140 and 1140-1142, also pp. 1185-1189, also pp. 1331-1335, pp. 564-567, Tom. LXII, p. 1366 (Rapport). — Ann. d. Missions Sc. et Lett. 5^e Sér., Tom. II, p. 321. Paris, 1866.*
- FOUQUÉ F. — Phénomènes chimiques de l'éruption de l'Etna en 1865. — *Compt. Rend. d. S. Acad. d. Sc. Tom. LXII, pp. 616 et 1366. — Ann. d. Missions Scient. et Lett. 2^e Sér., Tom. III, p. 165. Paris, 1866.*
- FOUQUÉ F. — Chlorure de Sodium fondu dans les fentes de la lave de 1879 — *Compt. Rend. d. l'Acad. d. Sc. d. Paris, 7 Juillet, 1879.*
- FOUQUÉ F. — Santorin et ses éruptions. — *Cap. XX. Paris, 1879.*
- FOUQUÉ F. — Sur la récente éruption de l'Etna (1879). Lettre à M. le Secrétaire perpétuel. — *Compt. Rend. d. l'Acad. d. Sc. Tom. LXXXIX, p. 33. Paris, Juillet-Décembre 1879.*
- FOUQUÉ F. — Reproduction artificielle des roches et des minéraux par la voie ignée. — *Compt. Rend. d. l'Acad. d. Sc. Bull. d. l. Soc. géol. d. France. Paris 1879-81.*
- FREDA G. — Sulla crisocolla dei monti Rossi all'Etna. — *Gaz. Chim. Ital. Vol. XIV, 1884, p. 3.*
- FRESENIUS W. — Phillipsit von Acicastello. — *Analyse u. opt. Prüfung. Groths Zeitschr. für Krystallogr. Bd. III. p. 44. Leipzig, 1880.*
- FROMONDUS LIBERTUS. — Meteorologia, eorum Libr. VI. I, I, cap. II. (Cit. by Massa, Etna). — *Antwerpen, 1627.*
- FUCHS C. W. C. u. GRAEBE. — Die Lava der Aetna — Eruption des Jahres 1865. — *N. Jahrb. f. Min. Geol. u. Pál. pp. 711-715, Stuttgart, 1866.*
- FUCHS K. — Vulkane u. Erdbeben. — *Leipzig, 1875. (Aetna, Krater 1869, Seit. 274). French edition: Les Volcans et les tremblements de Terre, Vol. I, Paris, 1866. (Etna, pag. 217.*
- FUCHS K. — Aetna Ausbruch 27 nov. 1868 — *N. Jahrb. f. Min. Geol. u. Pal. pp. 694, Stuttgart, 1869.*
- FUCHS K. — Die vulkanischen Ereignisse des Jahres 1879 Aetna. —

- Miner. und Petrogr. Mitth. vom G. Tschermak, Seit, 37, Wien, 1880.*
- GAETANI (DE) G. — Sopra l'acqua solforosa del pozzo di S. Venera. — *Atti d. Acc. Gioenia. Ser. 1^a, Vol. XIV, Catania, 1839.*
- GAETANI (DE) G. — Sopra l'acqua acidula di S. Giacomo. — *Atti d. Acc. Gioenia, Ser. 1^a, Vol. XVI, Catania, 1840.*
- GAETANI (DE) G. — Intorno alle acque solforose del Pozzo di S. Venera. Nuove Osservazioni. — *Atti d. Acc. Gioenia, Ser. 1^a, Tom. XX, Catania, 1843.*
- GALANTI G. M. (Luigi?). — Descrizione geografica delle due Sicilie. — *Tom. I-IV, Napoli, 1787. German by Jagemann. Bd. I-IV, Leipzig. 1790.*
- GALLIANO D. — Liste des éruptions de l'Etna. — *Ext. Voyage Pittoresque des Isles de Sicile, de Malta et de Lipari par J. Houel. T. XI, pp. 115-120.*
- GALVAGNI G. A. — Fauna Etnea. — *Atti d. Acc. Gioenia. Ser. 1^a, Vol. XI, XII, XIII, XIV, e XX, Catania, 1834-1843.*
- GALVAGNI G. A. — Sopra un nuovo fenomeno sonoro accaduto nella sommità dell'Etna. — *Atti d. Acc. Gioenia. Ser. 1^a, Vol. XII, Catania, 1835, pp. 8.*
- GEMMA F. — L'incendio di Mongibello del 1669. Poema in cento stanze. — *Catania, 1674, in 8°, pp. 50.*
- GEMMELLARO CARLO. — Sopra alcuni pezzi di granito e di lava antica trovati presso la cima dell'Etna. — *Catania, 1823, and Atti d. Acc. Gioenia, N. 11, pp. 190-223.*
- GEMMELLARO C. — Prospetto di una topografia fisica dell'Etna. — *Atti d. Acc. Gioenia, Ser. 1^a, Vol. I, Catania, 1825, pp. 19-34.*
- GEMMELLARO C. — Sopra il Basalto e gli effetti della sua decomposizione naturale. — *Atti d. Acc. Gioenia, Ser. 1^a, Vol. II, Catania, 1825, pp. 49-66.*
- GEMMELLARO C. — Sopra le condizioni geologiche del tratto terrestre dell'Etna. — *Atti d. Acc. Gioenia, Ser. 1^a, Vol. I, Catania, 1825, pp. 183-211.*
- GEMMELLARO C. — Sopra il confine marittimo dell'Etna. — *Atti d. Acc. Gioenia, Ser. 1^a, Vol. IV, Catania, 1827, pp. 179-193.*
- GEMMELLARO C. — Sopra la fisionomia delle montagne di Sicilia. — *Atti d. Acc. Gioenia. Ser. 1^a, Vol. IV, Catania, 1827, pp. 73-93.*
- GEMMELLARO C. — 1828. — *See Beffa.*

- GEMMELLARO C. — Sopra il clima di Catania. — *Att. d. Acc. Gioenia. Ser. 1^a, Vol. VI, Catania, 1829.*
- GEMMELLARO C. — Cenno sulla vegetazione dell'Etna. — *Atti d. Acc. Gioenia, Ser. 1^a, Vol. IV, Catania, 1830, pp. 77-86.*
- GEMMELLARO C. — Saggio sopra il clima di Catania, abbozzato dietro un decennio di osservazioni meteorologiche. — *Atti d. Acc. Gioenia. 1830, pp. 133-175 (C. A.).*
- GEMMELLARO C. — Ueber Basalt. u. basaltische Lava. — *Brief. Not. N. Jahrb. f. Min. Geol. u. Pal. S. 246, Stuttgart, 1830.*
- GEMMELLARO C. — Relazione accademica per l'anno VII dell'Accademia Gioenia letta nella seduta ordinaria dei 12 maggio 1831. — *Catania, 1831, in 8^o, p. 29. (Etna, eruption of 1494).*
- GEMMELLARO C. — Sopra un masso di lava corrosa dalle acque marine. — *Atti d. Acc. Gioenia, Ser. 1^a, Vol. VI, Catania, 1832, pp. 71-83.*
- GEMMELLARO C. — Aetna. Eruption 31 oct. 1832. — *Neu. Jahrb. f. Min. Geol. u. Pal. Seit. 182, u. 641. Stuttgart, 1833.*
- GEMMELLARO C. — Alcuni fenomeni osservati all'eruzione del 31 ottobre 1832. — *Atti d. Acc. Gioenia, Ser. 1^a, Vol. IX, Catania, 1833.*
- GEMMELLARO C. — De vallis Bovis in Monte Aetna geognostica constitutione. — *Atti d. Acc. Gioenia, Ser. 1^a, Vol. XII, 1834.*
- GEMMELLARO C. — Sulla costituzione fisica della valle del Bove. — *Atti d. Acc. Gioenia, Ser. 1^a, Vol. XII, 1835.*
- GEMMELLARO C. — Cenno geologico sul terreno della piana di Catania. — *Atti d. Acc. Gioenia, Ser. 1^a, Vol. XIII, p. 117, Catania, 1836.*
- GEMMELLARO C. — Sulla causa geognostica della fertilità del suolo di Sicilia. — *Atti d. Acc. Gioenia, Ser. 1^a, Vol. XIV, Catania, 1837.*
- GEMMELLARO C. — Aetna-Eruption 1838. — *Neu. Jahrb. f. Min. Geol. Pal. Seit. 531, Stuttgart, 1838.*
- GEMMELLARO C. — Cenno sull'attuale eruzione dell'Etna. — *Catania, 1838, in 8^o, pp. 37.*
- GEMMELLARO C. — Elementi di Geologia. — *Catania, 1840.*
- GEMMELLARO C. — Cenno storico sulla eruzione Etnea del 27 novembre 1842. — *Atti d. Acc. Gioenia, Ser. 1^a, Vol. XIX, Catania, 1842, pp. 18.*
- GEMMELLARO C. — Sulla varietà di superficie nelle correnti vulcaniche. — *Atti d. Acc. Gioenia, Ser. 1^a, Vol. XIX, Catania, 1842.*

- GEMMELLARO C. — Aetna-Eruption 1843. — *Neu. Jahrb. f. Min. Geol. u. Pal. Seit. 180, Stuttgart, 1844.*
- GEMMELLARO C. — Memoria sull'eruzione del 17 novembre 1843. — *Atti d. Acc. Gioenia, Ser. 1^a, Vol. XX, Catania, 1844, pp. 35.*
- GEMMELLARO C. — Sulla costa meridionale del Golfo di Catania. — *Atti d. Acc. Gioenia, Ser. 2^a, Vol. II, Catania, 1845.*
- GEMMELLARO C. — Sui crateri di sollevamento e di eruzione. — *Atti d. Acc. Gioenia, Ser. 2^a, Vol. III, Catania, 1846.*
- GEMMELLARO C. — Sul basalto decomposto dell'isola dei Ciclopi. — *Atti d. Acc. Gioenia, Ser. 2^a, Vol. II, Catania, 1846.*
- GEMMELLARO C. — Saggio sulla costituzione fisica dell'Etna. — *Catania, 1847, in 4.^o*
- GEMMELLARO C. — Saggio di storia fisica di Catania. — *Atti d. Acc. Gioenia, Ser. 2^a, Vol. V, Catania, 1848.*
- GEMMELLARO C. — Breve ragguaglio dell'eruzione dell'Etna del 21 agosto 1852. — *Atti d. Acc. Gioenia, Ser. 2^a, Vol. IX, Catania, 1852, pp. 30, pl. 3.*
- GEMMELLARO C. — Una corsa intorno all'Etna. — *Atti d. Acc. Gioenia, Catania, 1853.*
- GEMMELLARO C. — Sulla struttura del cono dei monti Rossi e dei suoi materiali. — *Atti d. Acc. Gioenia, Ser. 2^a, Tom. XI, Catania, 1854.*
- GEMMELLARO C. — Sul profundamento del cono dell'Etna avvenuto il 6 settembre dell'anno 1857. — *Atti d. Acc. Gioenia, Ser. 2^a, Vol. XIV, Catania, 1857.*
- GEMMELLARO C. — Vulcanologia dell'Etna. — *Atti d. Acc. Gioenia, Vol. XXXIV, p. 176, Catania, 1857.*
- GEMMELLARO C. — La Vulcanologia dell'Etna che comprende la topografia, la geologia, la storia delle sue eruzioni, non che la descrizione e lo esame dei fenomeni vulcanici. — *Catania, 1858, in 4.^o, pp. XIV + 266, I map. pl. II. (C. A.).*
- GEMMELLARO C. — Ulteriori considerazioni sul Basalto in appendice alla vulcanologia dell'Etna. — *Atti d. Acc. Gioenia, Ser. 2^a, Vol. XVI, Catania, 1860, pp. 24.*
- GEMMELLARO C. — Dell'eruzione dell'Etna 1863. — *Catania, 1863.*
- GEMMELLARO C. — Sulla cima dell'Etna considerata sotto il rapporto dell'utile che appresta al viaggiatore istruito e allo scienziato. — *Atti d. Acc. Gioenia, Ser. 2^a, Vol. XIX, Catania, 1863.*
- GEMMELLARO C. — Breve ragguaglio della eruzione dell'Etna negli ultimi di Gennaio 1865. — *Catania, 1865.*

- GEMMELLARO C. — Un'addio al maggior vulcano di Europa. — *Catania 1866. 2ª ediz. con aggiunte, Catania, 1866.*
- GEMMELLARO C. — Descrizione di una nuova carta geologica di Sicilia. — *Giorn. d. Sc. Lett. d. Palermo, N. 134.*
- GEMMELLARO C. — Sopra il terreno giurassico. — *Memoria prima sul terreno giurassico di Tauromina, in 4º. p. 23.*
- GEMMELLARO GAETANO GIORGIO. — Sul ferro oligisto di monte Corvo. — *Atti d. Acc. Gioenia, Ser. 2ª, Vol. XIV. Catania, 1858.*
- GEMMELLARO G. G. — Sui modelli esterni della Quercia in contrada Pinitella sull'Etna. Lettera al Prof. Guiscardì. — *Giorn. d. Gab. Lett. d. Acc. Gioenia. Fasc. 6º, Nov.-Dec. 1858, in 8º, pp. 6. (C. A.).*
- GEMMELLARO G. G. — On the volcanic cones of Paternò and Motta (S. Anastasia). — *Proceed. of the Geol. Society of London. 29 Nov. 1861.*
- GEMMELLARO GIUSEPPE. — Quadro istorico topografico delle eruzioni dell'Etna. — *Catania, 1824. London, 1828, fol. I.*
- GEMMELLARO G. — Sunto del giornale dell'eruzione dell'Etna nel 1852. — *Atti d. Acc. Gioenia. Ser. 2ª, Vol. IX. Catania, 1853.*
- GEMMELLARO MARIO. — Memoria dell'eruzione dell'Etna nel 1809. — *Messina 1809, in 8º, 2ª ediz. Catania, 1820, pp. 41, pl. 1.*
- GEMMELLARO M. — Giornale dell'eruzione dell'Etna avvenuta a 27 ottobre 1811. — *Manuscript, with appendix?*
- GEMMELLARO M. — Giornale dell'eruzione dell'Etna avvenuta alli 27 Maggio 1819. — *Catania, 1819.*
- GEMMELLARO M. — Extrait d'un Journal tenu à Catane pendant quatorze ans. — *M. S. copy, fol. II. (C. A.).*
- GEMMELLARO M. — Registro di osservazioni. — (*See: Vulcanologia di C. Gemmellaro.*)
- GEMMELLARO RAIMONDO. — Manoscritto sulla eruzione del 1766 con appendice.
- GENTILE-CUSA B. — Sulla eruzione dell'Etna di Maggio-Giugno 1886. — *Catania, 1886, in 8º, fol. II. pp. 210, VII heliolypes, 6 figs. (C. A.).*
- GHIGI I. B. — Nuova carta della Sicilia. Fogli I-IV. — *Roma, 1779.*
- GIACOMO (DI) A. — Idrologia generale dell'Etna. Discorso d'introduzione. — *Atti di Acc. Gioenia. Ser. 1ª, Vol. IX. pp. 23-40, Catania, 1832.*
- GIGAULT DE LA SALLE A. E. — Voyage pittoresque en Sicile. — *Vol. I-II, in fol. pl. 92, Paris, 1822.*

- GIMMA. — Fisica sotterranea. — *Vol. I-II. Napoli, 1730.*
- GIOENI G. (1747-1822). — Relation d'une pluie colorée de sang tombée sur le versant méridional de l'Etna (in English). — *Philos. Trans. London, 1782.*
- GIOENI G. — Relazione dell'eruzione dell'Etna avvenuta nel luglio del 1787. Scritta d. C. G. G. abitante della prima regione del monte. — *Catania, 1787.*
- GIOENI S. — Alcune lettere di uomini illustri nella storia naturale dirette al Cav. G. Gioeni. Aggiuntavi la descrizione data dall'ab. Spallanzani del Gabinetto di St. Nat. Siciliana in casa del medesimo Gioeni. — *Catania, 1815. in 4°, fol. III. pp. 41. (C. A.).*
- GIUFFRIDA A. — Quaesita medica. — *With notes on the mineral waters of Paternò. Catania 1753.*
- GIUSTI G. D. — Lettera intorno all'ultima eruzione (1819) dell'Etna. — *Giorn. Encicl. d. Napoli. Fasc. VII. 1819.*
- GOLZIUS H. — De vita rebusque gestis Regum Siciliae. — *Pars. II. (Thes. Sic. VIII. p. 1144.)*
- GONTOULAS. — Erupt. d. 1321, et 1323. — *Hist. Profan. dec. IV. sect. 14.*
- GORINI P. — Sull'origine dei Vulcani. — *Napoli, 1872, in 8°.*
- GOSSELET G. — Observations géologiques faites en Italie. — *Mém. d. Soc. Imp. des sciences d. l'Agriculture et des Arts de Lille, III^e série, vol. 6, Lille, 1869. See pp. 25 and follow.*
- GOUBILLON (DE) A. — Voyage critique à l'Etna. — *II. Paris, 1820, 2 vols. in 8°, Vol. I, pp. 541, Vol. II, pp. 463, pl. 34.*
- GOUTOUL. — Historia profana. — *Dec. 6, See. XII.*
- GRAEBE D. — 1865. — *See Fuchs, C. W. C.*
- GRAEVII. — Thesaurus scriptorum Siciliae, Sardiniae, Corsicae Cura P. Burmanni. (Also cited several times in books and in the present Bibliographies as Thesaurus antiquitatum et Historiarum Siciliae, or as : Thesaurus Siculus.) — *Lugd. Batav. 1723-25. Vol. I-XV. See also under names of respective authors.*
- GRANDJEAN. — 1859. — *See Deville (Sainte-Claire).*
- GRASSI M. — Relazione storica dell'eruzione Etnea del 1865. — *Catania, 1865, in 8°, pp. 92.*
- GRASSI M. — Relation historique de l'éruption de l'Etna en 1865. — *Bull. d. l. Soc. d. Géog. Juillet, 1866, pp. 5-29. (C. A.).*
- GRASSI M. — Relazione dell'eruzione dell'Etna nel novembre e dicembre 1868. — *Il Nuovo Cimento, Ser. 2^a. Tom. I, pp. 186-191. 1869. (Translated by J. Roth; See Roth.).*

- GRASSI M. — Sull'eruzione dell'Etna del 1879. — *Cenni Giorn. d. Sicilia*. N.º 151. Palermo, 7 giugno 1879.
- GRAYINA C. (PRINCIPE DI VALSAVOYA). — Poesie. — *Sonetto per la Eruzione dell'Etna del 1832*, pp. 72, Catania, in 12. (p. 10).
- GRAYINA M. B. — Notes sur les terrains tertiaires et quaternaires des environs de Catane. — *Bull. d. l. Soc. géol. d. France*, 2.º Sér., Tom. XV. pp. 391-421. Paris, 1859.
- GREGORI A. — 1879. — See: Mantorani.
- GREGORI SANCTI PAPAE — I. Dialog. — *Lib. IV. Cap. 30, n.º 35*.
- GREGORIO (DI) G. — 1703-1771. Lettera sulle acque acidole di Paternò. — *Opusc. di Aut. Siciliani*. III. 269. Palermo, 1788.
- GROSSO (DE) D. J. B. — Catanense decachordum sive novissima sacrae Catanensis Ecclesiae notitia. — *Thes. sic. X. Cataniae*, 1654.
- GROSSO (DE) D. J. B. — Catana sacra (Erupt. 1654.). — *Cataniae*, 1642.
- GROSSO (DE) D. J. B. — Agatha catanensis. (Erupt. 1656. — *Cataniae*, 1656.
- GSELL FELS, TH. — Sicilien aus Meyers Reisehandbüchern. Cap. XVIII. Etna. — *Leipzig*, 1877. *Short and detailed descript. of Etna and its eruptions, with a history of the last.*)
- GUALTERIUS G. — Siciliae objacent, insularum et Brutiorum antiq. tabulae. — *Messanae*, 1664.
- GUARNERII G. B. — Le zolle narrationi storiche Catanesi. — *Tom. III. (Cit. by Massa, Etna.) Catania*, 1651.
- GUARNERII G. B. — Dissertationes historicae Catanenses. — *Thes. Sic. XI*.
- GUGLIELMINI D. (1655-1710). — Catania distrutta dal terremoto nel 1693. — *Palermo*, 1695.
- GUIDO V. A. DI PATERNÒ. — Breve istorica descrizione del portentoso miracolo della gloriosa vergine e martire Santa Barbara, principale patrona della fertilissima città di Paternò, operato al 27 maggio dell'anno 1780. Della liberazione del feudo di Villabona o sia Ragalna dall'incendio di Mongibello. — *Catania*, 1785.
- GULLI S. — Ricerche sulla profondità dei Vulcani. — *Atti d. Acc. Gioenia. Ser. 1.ª, Vol. XI. Catania*, 1834.
- GÜMBEL C. W. — Ueber das Eruptionsmaterial des Schlammvulkanes von Paternò am Aetna und der Schlammvulkane im Allgemeinen. — *Sitz. Berich. der Bayr. Akad. d. Wiss. München*, 1879, in 8º, pp. 57. — *Abstract: Boll. d. R. Com. geol. d' Italia. Vol. X. pp. 506 e 561, Roma*, 1879.
- GÜMBEL C. W. — Vulkanische Asche des Aetna von 1879. — *Neues*

- Jahrb. für. Min. Geol. u. Pal. Bd. I, Seit. 859. Stuttgart, 1879. — Abstract in: Boll. d. R. Com. geol. d' Italia. Vol. X, pp. 505. Roma, 1879.*
- GUSTANAVILLA (DE) P. — Notae in Petrum Blesensem. — (*Cit. by Massa, Etna.*)
- HAMILTON W. — Observations on mount Vesuvius, mount Etna and other Volcanoes of the two Sicilies. — *London, 1772, in 8°, pp. IV+179, pl. VI.*
- HAMILTON W. — Voyage au mont Etna en juin 1769. — *Extract from " Voyage en Sicile et dans la Grande Grèce "... addressed to Wincheltmann and translated from the German, Lausanne, 1773, in 12°, M. S. Copy. (C. A.).*
- HAMILTON W. — Campi Flegraci. — *I. II. Napoli, 1776. Supplement 1779.*
- HAMILTON W. — Voyage au Mont Etna en 1869, (trad. en français par M. de Villebois). — *1780.*
- HAMILTON W. — Oeuvres complètes, commentées par l'Abbé Giraud-Soulavie. — *Paris, 1781, pl. 1.*
- HAMILTON W. — Account of the Earthquakes in Italy. — *London 1783. Tradotto ed illustrato da G. Sella. — Firenze 1783.*
- HAMILTON W. — Waarneemingen over den Vuurbergen in Italie, Sicilie, en omstreiks den Rhyn als mede over de Aardbevingen, voorgevallen in Italie, 1783. — *Amsterdam, 1784, in 8°, pp. 552. (C. A.).*
- HAUER (VON) K. — Analyse der Lava von 1852. — *Wien, Akad. Ber. 11, 89, 1853.*
- HERBERGER J. E. — Chemische Analyse der körnigen Lava vom Aetna. — *Brandes' Archiv. d. Apoth. Vereins, 1830. — N. Jahrb. f. Min. Geol. u. Pal. Seit. 426. Stuttgart, 1832.*
- HERBINII J. — Dissertationes de admirandis mundi Cataractis supra et subterraneis, earumque principio, elementorum, etc. etc. — *Amstelodami, 1678, in 4°, pp. 11-267-17, fig.*
- HOFF K. E. A. (VON). — Geschichte der natürlichen Veränderungen d. Erdoberfläche. — *I-III. Gotha, 1822, 1824, u. 1834. (Etna und Sicilien. Bd. II. § 10. Seit. 221-252. Die Liparischen Inseln. Bd. II §, Seitz. 252-267.*
- HOFF K. E. A. (VON) — Cronik der Erdbeben u. Vulkan-Ausbrüche. — *2 Theile. Gotha 1810-11. — Also in the Poggd. Ann. Bd. VII, 1841.*
- HOFFMANN F. — Verhalten der in den letzten 40 Jahren zu Palermo beobachteten Erdstösse. — *Poggd. Ann. Bd. XXIV, 1832.*
- HOFFMANN F. — Mémoire sur les terrains volcaniques de Naples,

- de la Sicile etc. — *Bull. d. l. Soc. géol. de France. Vol. III, 1833, pp. 170-180.*
- HOFFMANN F. — Physikalische Geographie, Erhebungskratere, Vegetation Siciliens, Aetna u. a. — *Berlin, 1837.*
- HOFFMANN F. — Geschichte der Geognosie u. Schilderung der vulkanischen Erscheinungen. — (*Aetna, pp. 273 u. ff.*) *Berlin, 1838.*
- HOFFMANN F. — Geogn. Beobachtungen auf einer Reise durch Italien u. Sicilien in Jahre 1830-32 — (*d. v. Dechen*). *Karstens Archiv. Bd. XIII, 1839.* — (*Auch separat erschienen*). *Berlin, 1839.*
- HOFFMANN F. — Karte von Sicilien. — (*Aetna mit seinen Lavaströmen*). *Karstens Archiv. Bd. XIII, 1869.*
- HOFFMANN F. — Lettera al signor E. Repetti. (Sull' altezza dell' Etna. — *Giorn. Letter. d. Sicilia, Tom. XXXV, pp. 54.*
- HOFFMANNUS G. — Lexicon topographicum Siculum. (*Cil. by Massa, Etna.*)
- HOLM. A. — Geochichte Sicilieno im Alterthum — 2 Bde. *Bd. I, 1869, Bd. II, 1874, Leipzig.*
- HOLM A. — Das alte Catania, mit Plan. — *Lübeck, 1873.*
- HOLM A. — Geschichte Siciliens —?
- HOMODEIS (FILOTEO DE) A. — *See Filoteo.*
- HOROZCH COVARRUVIAS DE LEYVA J. — Episcopi Agrigentini. Emblemata moralia memoriae Sanc. D. D. Didaci Covarriuivas de Leyva, etc. etc. — *Agrigenti, 1601, 3 books in 1 vol. in 8°. with 100 pl. (book I, pp. 4-256, Book II, pp. 110. Book III, pp. 100.).*
- HOUEL J. — Voyage pittoresque dans les îles de Sicile, de Malte et de Lipari. — *Tom. I-IV, in fol. Paris, 1782-87.*
- HOUEL J. — Reisen durch Sicilien u. Malta, etc. — *Übersetzt v. J. L. Heerl, mit Kupst. Vol. I-IV, 8.° Gotha, 1797-1809.*
- HUMBOLT (VON) A. — Ueber Bau u. Wirkungsart der Vulkane. — *Berl. Akad. d. Wiss. Seit. 137, Berlin, 1825.*
- HUMBOLT (VON) A. — Ansichten der Natur. — *Bd. II, Tübingen 1839. (Notices on Etna, without historical date).*
- IDACII. — Chronica. — (*Erupt. of 72, A. D.*)
- ILMONI I. — Misceller an Vulcanen Aetna. — *Föredr för Vet. Soc. d. 4 Mars 1839 och d. 26 Apr. 1841, in 4°, pp. 4. (C. A.).*
- INGO V. — *See: Alfieri G.*
- ITERLANDI E SIRUGO. — Osservazioni geologiche e geognostiche sopra i terreni di Avolo. — *Atti d. Acc. Gioenia. Ser. 1^a, Vol. XII, Catania, 1835.*

- INTERLANDI E SIRUGO. — Sopra i basalti globulari del Morgo. — *Atti d. Acc. Gioenia, Ser. 1.^a, Vol. XIV, Catania, 1837.*
- INTERLANDI E SIRUGO. — Sopra i terreni di Lognina, Aci-Trezza e Castello. — *Atti d. Acc. Gioenia, Ser. 1.^a, Vol. XV. Catania, 1838.*
- ISSEL A. — Saggio di una teoria sui vulcani. — *N. Antologia di Firenze, 1875. In abstract: Boll. d. Vulc. Ital. Fasc. I, II, III, pp. 13, Roma, 1875.*
- ISSEL A. — Sullo stato sferoidale dell'acqua nelle lave incandescenti. — *Nota, Boll. Vulc. Ital. Fasc. IV e V, pp. 57, Roma, 1876.*
- ITTAR S. — Viaggio pittorico all' Etna contenente le vedute più interessanti di questo Monte, e gli oggetti più rimarchevoli che nelle sue Regioni esistono, con una Carta Topografica, che indica con numeri i punti dai quali il Disegnatore le ha espresse, ed una breve descrizione di esso e del suo itinerario. — ? in 4.^o, obl. pl. XXV. (B. N.).
- JERVIS G. — Tesori sotterranei dell' Italia. — 4 Vols. in 8.^o, Torino, 1874-1888. *Numerous plates.*
- JOHNSTON-LAVIS H. J. — Note on the occurrence of Leucite at Etna. — *Reports British Association for Advancement of Science. London, 1888.*
- JOHNSTON LAVIS H. J. — Su una roccia contenente leucite trovata sull' Etna. — *Boll. d. Soc. d. Microscopisti It., Vol. I, 1889. Fasc. 1-2, pp. 26, with one photo-engraving.*
- JOHNSTON-LAVIS H. J. — Viaggio scientifico alle regioni vulcaniche italiane nella ricorrenza del centenario del « Viaggio alle due Sicilie » di Lazzaro Spallanzani. — (*This is the programme of the excursion of the English geologists that visited the south Italian volcanoes under the direction of the author. (It is here included as it contains various new and unpublished observations.* — Naples, 1889, in 8.^o pp. 1-10.
- JOHNSTON-LAVIS H. J. — The State of the active Sicilian Volcanoes in September 1889. — *Scottish-Geograph. Mag. Vol. VI. N.º 3, March 1890. pp. 145-150.*
- JOY. — Analyse der Lava des Stromes d. J. 122 — See C. G. Rammelsberg: *Handwörterbuch. Supplem. 5, Seite 157.*
- JUDD W. J. — Contributions to the Study of Volcanoes. — *Geol. Mag. Vol. II. London, 1876.*
- JULIEN JOHN J. — L'Etna et le troisième congrès du Club Alpine Italien à Catane. — *Echo d. Alpes, publicat. du Club Alpin Suisse, N.º 4, pp. 263, Genève, 1880.*
- JUSTINUS. — Hist. Lib. IV. cap. 1, 5, 14. —

- KARACZAY F. — Manuel du Voyageur en Sicile, avec une carte. — *Stuttgart*, 1826.
- KEPHALIDES M. A. W. — Voyage à l'Etna. — *Nouv. Ann. des Vo.* 2^e série, t. 4, Juin 1827, in 8.^o, pp. 289-306. (C. A.).
- KIRCHER A. — Mundus subterraneus in XII libris digestus. — *Amsterodami, Waesberg* 1678. (Vol. I. Lib. IV. Pyrographicus, Cap. VIII. Aetnae Descriptio, Cap. IX. Crateris Aetnae descr.).
- KLUGE E. — Ueber Synchronismus u. Antagonismus von vulkanischen Eruptionen. — *Leipzig*, 1863.
- KUDERNATSCH J. — Chemische Untersuchung des Auget vom Aetna. — *Poggd. Ann. Bd. XXXVII, Seit. 577*; — auch *Neu. Jahrb. f. Min. Geogn. u. Geol. Seit. 597, Stuttgart*, 1836.
- LALLEMONT. — Lettre à Dolomieu sur l'éruption de l'Etna en 1792. — *Journ. de Phys.* 1792, T. 40, pp. 481-482 and t. 41, pp. 120-122. (C. A.).
- LANDGREBE G. — Naturgeschichte der Vulkane. — 2 Bd. *Gotha*, 1855.
- LANZA P. — Eruzione del 1646. — (*Cit. by Recupero*).
- LASAULX (VON) A. — Etnabesteigung am 2 oct., 1878. Brief. *Schlesische Ztg.* v. 15 Oct. 1878.
- LASAULX (VON) A. — Der Aetna und seine neueste Eruption von 1879. — *Deutsche Rev.* 1879. *Septemberheft*.
- LASAULX (VON) A. — Sicilien, ein geogr. Charakterbild. — *Bonn*, 1879. (*Aetna Seit. 13-26*).
- LASAULX (VON) A. — Szabòit von Biancavilla am Etna, Eisenglanz ebendaher. — *Groths Zeitschr. f. Krystallohr. Bd. II, Seit. 288. Leipzig*, 1879. — *Abstract: Boll. d. R. Com. Geol. d'Italia, Vol. X, pp. 372, Roma*, 1879.
- LASAULX (VON) A. — Ueber die Salinellen von Paternò and ihre neueste Erupt. — *Zeitschr. d. deutsch. geol. Gesell. Berlin*, 1879.
- LASAULX (VON) A. — Der Aetna, 1880. — See: *Sartorius von Waltershausen*.
- LAVINI, CONTE G. — Rime filosofiche colle sue annotazioni alle medesime. — *Milano*, 1750, in 4^o, pp. XXXII-232. (pp. 74-85).
- LAVIS. — See Johnston-Lavis.
- LAZZARO N. — Da Napoli all'Etna. — *Due corrispondenze all'Illustraz. Ital. di Trèves. Sem. 1^o, pp. 388. Sem. 2^o, pp. 6, con una incisione. Milano*, 1879.
- LEANTI A. — Stato presente della Sicilia. — Vol. II. *Palermo*, 1761, in 8^o, (*With a few notes on Etna*).

- LEBLANC. — 1858. — *See Deville.*
- LENTINI (DA) S. — Chronicon o Chronaca in Rosario di Gregorio. — *Biblioth. script. Arag. Panormi, 1691. (Cit. by Ferrara and Caruso).*
- LENTINI (DA) S. — Historia M. S. del conte Rogero. — (*Cit. by Massa, Etna*). *Biblioth. script. Arag. Vol. II, Panormi, 1691.*
- LEONHARD (VON) C. C. — Die Basalt Gebilde. — 2 Bde. *Stuttgart 1832.*
- LEONHARD (VON) C. C. — Geologisches Atlas. — *Stuttgart, 1841. (2 Karten des Etna, die der Lavaströme nach Gius. Gemmellaro Quadro).*
- LEONHARD (VON) C. C. — Geologie oder Naturgesch. der Erde. — Bd. I-V, *Stuttgart, 1844. (Der Aetna 7^{te} Vorlesung. Bd. I, Seit. 189).*
- LIGHT MAJOR. — Sicilian scenery. — *London, 1828, in 4.^o*
- LOEWE. — Analyse der Lava von 1669. — *Poggd. Ann. Bd. XXXVIII, pp. 160, 1836.*
- LONGO A. — Colpo d'occhio geologico sul terreno di Caltagirone. — 1864.
- LONGO A. — Ad un addio del Prof. Cav. Ufficiale C. Gemmellaro. Parole di Risposta del vecchio Mongibello. — *Catania, 1866.*
- LONGO A. — Un apostrofè all'Etna oggi Mongibello. — *Catania, (in versi), 1869.*
- LONGO A. — Sulle cagioni probabili delle accensioni vulcaniche subaeree. — *Atti d. Acc. Gioenia. Ser. 3^a, Vol. IV, 1869.*
- LONGO A. — Sulle interpretazioni dei fenomeni chimici in rapporto alle leggi della natura. — *Atti d. Acc. Gioenia. Ser. 3^a, Vol. V. Catania, 1870.*
- LONGO A. — Osservazioni sopra alquanti squarci della memoria del Sig. Mallet « Volcanic Energy ». — *Atti d. Acc. Gioenia, Ser. 3^a, Vol. XIV, Catania, 1879.*
- LONGO A. — L'Etna al cospetto della Scienza. — *Catania, 1886, in 4^o; pp. 63, Map. 1. (C. A.).*
- LONGOBARDO A. — Extrait d'une lettre à M. Ch. Sainte-Claire Deville (éruption de l'Etna 7 Juillet 1863). — *Compt. Rend. Acad. Sc. Paris, 1863, T. 57, p. 157. (C. A.).*
- LONGOBARDO A. — Extrait d'une lettre à M. Ch. Sainte-Claire Deville (Eruption de l'Etna, 31 janv. 1865). — *Compt. Rend. Acad. Sc. Paris, 1865, T. 60, p. 354. (C. A.).*
- LONGUS J. — Continuation du Maurolycus. — *See Maurolycus.*
- LUCA P. DE. — Lettera sul miserando caso della esplosione avven-

- nuta addì 25 Nov. 1843 durante la eruzione dell'Etna.—*Rend. R. Accad. Sc. Fis. Mat. Napoli, 1843-46, T. III, pp. 177-185.*
- LUC J. A. DE. — Formation des Montagnes Volcaniques. — *Observations au Vésuve et à l'Etna. La Haye. Paris, 1780, in 8.º, pp. 19.*
- LUCA PL. DE. — Eruzione dell'Etna in Novembre del 1843, e suoi effetti nell'industria dei Brontesi. — *Napoli, 1844, in 8º, pp. 27, pl. 1. (B. N.). See: Museo di Scienze e Letteratura. pp. 145-169.*
- LUCILIUS JUNIOR. — Ancienne traduction de A. C. Schmid.—1769.
- LUCILIUS JUNIOR. — Meinecke. — *Quedlinburg, 1818.*
- LUCILIUS JUNIOR. — Recensuit notasque Jos. Scaligeri, Arid. Lindenbruchii et suas addidit F. Jacobs. (With translation in verse) — *Lipsiae, 1826, in 8º.*
- LUCILIUS JUNIOR. — Traduction française par J. Chenu. — *Paris, 1843.*
- LUCILIUS JUNIOR. — Etna; — (See: « Wernsdorffs excurs. ad Luc. Aetn. in Poëtae latini minores »). —
- LUCRETIVS. — *Lib. VI, 639-702.*
- LUDOVICUS AURELIUS. — Erupt. of 1169. — *Ex Baronio in epist. Lib. XI.*
- LUDOVICUS CREMONENSIS. — See *Cremonensis.*
- LUEBECK (VON) A. — Cronica Slavorum. — (Written in 1209) Vol. XIX, *Pertz. Monument. Historic. Germanic. Scriptorum. (Cap. XXI, pag. 159. Epistola Conradi cancellarii episcopi electi Hildeseimensis. Anno 1195.) Notice on Etna and an eruption of the period.*
- LYCURGOS. — Contra Leokrates 95. — *Erupt. des Fratelli pii.*
- LYELL C. — Principles of Geology. — London. Numerous editions. *Principes de Géologie. Traduction française sur la sixième édition anglaise, Lyon, 1846. (Etna. Part. 1ª, pag. 137-205. Stromboli. Part. 3ª, pag. 357).*
- LYELL C. — On Lavas of Mount Etna formed on steep Slopes and on Craters of elevation. — *Philosoph. Trans. Part. II, 1858, Abstract in French. See: Archiv. d. Sc. d. l. Biblioth. Univ. Genève, novembre 1859. Abstract in German: Zeitschrift, d. deut. geol. Gesell. Berlin, 1859, and Journ. Sc. 2nd Ser. Vol. XVI, pp. 214-219, etc.*
- LYELL C. — Ueber die auf steil geneigter Unterlage erstarrten Laven des Etna und über Erhebungskratere. — *Taf. I-IV, in 8º, Auch. Roth. J. Zeitsch. d. Deutsch. geol. Ges. Band. XI, Seit. 149, Berlin, 1859*

- LYELL C. — Principles of Geology. — 2.^a Edit., Chap. Aetna, London, 1872
- MACRI V. (DI NICOLOSI). — (Erupt. of XVII century) — *Manuscript. cit. by Recupero: abstract printed in the appendix to his work.*
- MACROBIUS. — Saturn. — Vol. V, pag. 17.
- MAGGIORE D. G. — 1842. — See, Aradas A.
- MAGINI G. M. — Descrizione della Sicilia. — (Cit. by Di Gregorio M. sur les eaux minérales de Paternò).
- MAGNETI V. — Notitie istor. di Terramoti. — (C. by Mongitore).
- MALAGOLI VECCHI M. — Il Mediterraneo illustrato, le sue Isole. — 1841.
- MALATERRA G. — De rebus gestis Roberti Guiscardi ducis Calabriae et Rogeri comitis Siciliae libri quatuor. — *Lib. II, cap. XXX, Erupt. of XI century). Thes. Sic. Vol. VIII, 1725.*
- MALHERBE A. — Ascension à l'Etna. — *Ext. des Mém. de l'acad. 1841, pp. 32, (C. A.).*
- MALLET R. — On the mechanism of production of volcanic dykes. — *Quart. Journ. of geol. Soc. of London, Vol. XXXII, pag. 472. London, 1876.*
- MALVICA F. — Gita alle Madonie. — *Effemeridi Scientifiche e Letteraria per la Sicilia, Fasc. 35, Palermo, 1835, in 8°, (B. N.).*
- MANCINI C. — Narrativa del fuoco uscito dal Mongibello il dì undici marzo 1669. — *Messina, 1669.*
- MANCUSI P. ANT. — Istoria di Sta. Rosalia etc. — *Palermo, 1721, in 4°, Vol. I, pp. 17-456. Vol. II, pp. 19-221, (Notizia del Monte Pellegrino (Etna o Mongibello) (Vol. I, p. 117-137).*
- MANNERT H. — Geographie der Griechen und Römer. — (Bd. IX, Seit. 2 Geogr. v. Sicilien). 8.^o Leipzig, 1832. (*Ancient notices of Etna*).
- MANTOVANI P. — Sulla formazione basaltica delle Isole dei Cicli presso Catania. — *Roma, 1870.*
- MANTOVANI P. E GREGORI A. — La eruzione dell' Etna 1879. — *Bull. d. Club Alpino ital. N. 37. Torino, 15 giugno, 1879.*
- MARANA. — Des Montagnes de Sicile et de Naples, qui jettent des feux continuels: de la nature de leurs effets. — *Lettre XLIII, de l'Espion Turc, T. I, pp. 153-157 (C. A.).*
- MARASCHI G. — Lettera sulla costruzione della Gratissima e della casa inglese detta altrimenti di Mario Gemmellaro fabbricata sopra l' Etna sin dal 1804. — *Palermo, 1829, in 8°, pp. 13 (C. A.).*
- MARAVIGNA C. — Memorie compendiose dell'ultima eruzione del-

- l' Etna , accaduta nel mese di novembre 1802. — *Catania, 1803, in 4°, pp. 19.*
- MARAVIGNA C. — Tavole sinottiche dell' Etna. — *Catania, 1811, Paris, 1838.*
- MARAVIGNA C. — Istoria pell'incendio dell'Etna del mese di maggio 1819. — *Catania, 1819, in 4°, pp. 102, pl. 2. Also in the Biblioth. Ital. Tom. XVIII, pag. 198.*
- MARAVIGNA C. — Della causa dei vulcani, dei loro fenomeni e delle sostanze eruttate. — *Giorn. d. Sc. Lett. ed Arti, Tom. I, pp. 223, e Tom. II, pp. 3, Palermo, 1823.*
- MARAVIGNA C. — Su i miglioramenti che le recenti scoperte chimiche hanno apportato alla soluzione di alcuni fenomeni geologici e particolarmente alla teoria dei vulcani. — *Atti d. Acc. Gioenia, Ser. 1ª, Vol. VII. Catania, 1830.*
- MARAVIGNA C. — Alcune idee sull'eruzione del fuoco nella produzione di alcuni membri della serie geognostica sui rapporti del terreno trachitico e basaltico con quello dei vulcani estinti ed attivi. — *Atti d. Acc. Gioenia, Ser. 1ª, Vol. VIII, Catania, 1831, pp. 25.*
- MARAVIGNA C. — Materiali per servire alla Oritognosia Etnea. — *Atti d. Acc. Gioenia, Ser. 1ª, Tom. V, pp. 141-161: VI, 205-214, 1832, VIII, 25-51, 1834, IX, 231-295. Catania, 1829-1834.*
- MARAVIGNA C. — Memoria sopra la eruzione apparsa nella plaga occidentale dell'Etna nelle notti del 31 ottobre, 1 e 3 novembre dell'anno 1832, per cui fu in pericolo il comune di Bronte. — *Atti d. Acc. Gioenia, Ser. 1ª, Vol. IX, Catania, 1832.*
- MARAVIGNA C. — Appendice alla memoria sopra i silicati. Oritognosia etnea. — *Atti d. Acc. Gioenia, Catania, 1834.*
- MARAVIGNA C. — Esame di alcune opinioni del sig. N. Boubée contenute nelle sue opere intitolate "Géologie populaire, et tableau de l'état du globe à ces différens âges". — *IV, édit. 1834, in 4°, pp. 48.*
- MARAVIGNA C. — Cenno sul solfato di calce che formasi nell'interno del cratere dell'Etna, sulla genesi di altri sali che ivi rimangono e specialmente di una sostanza molto rassomigliante al Caolino prodotta dalla decomposizione delle lave. — *Atti d. Acc. Gioenia, Ser. 1ª, Vol. XII, Catania, 1835, pp. 13.*
- MARAVIGNA C. — Cenno sul ferro Oligisto ottaedrico del Monte del Corvo vicino a Biancavilla. — *Atti d. Acc. Gioenia, Ser. 1ª, Tom. XI, Catania, 1836, pp. 6.*
- MARAVIGNA C. — Sulla Jalite del Basalto della Motta, sulla Tre-

- molite dell'Isola dei Ciclopi, sull'Idroclorato di ammoniaca della eruzione di Bronte nel 1832. — *Atti d. Acc. Gioenia, Ser. 1^a, Tom. XII, Catania, 1835, pp. 81-88.*
- MARAVIGNA C. — Memorie di Orittognosia Etnea e dei Vulcani estinti della Sicilia. — *Parigi, 1838, in 8^o, pp. 203, pl. 2, (C. A.). An abridged form of the above appears in the reports of Congrès Sc. de France à Clermont en 1838, in 8^o, pp. 331-349 (C. A.).*
- MARAVIGNA C. — Mémoires pour servir à l'histoire naturelle de la Sicile. — *Paris, 1838, in 8^o, pp. 86, pl. 6.*
- MARAVIGNA C. — Su i rapporti che passano fra le rocce dell'Etna e sul modo di loro emissione — VII Congresso degli Scienziati Italiani in Napoli. *Napoli, 1845, in 4^o, pp. 40 (C. A.).*
- MARAVIGNA C. — See Zuccarello.
- MARGALLE. — 1866. — See Zurcher.
- MARINI N. — De formidabilissimo terrae motu, etc. Poema. — *Panormi, 1729, in 8^o.*
- MARMONT (DUKE OF RAGUSA). — Voyage en Sicile. — 3rd Edition, *Paris, 1839, in 8^o, pp. 372 (C. A.).*
- MARMONT. — Carte des Eruptions du Mont Etna. Appended to the work of Marmont. "Voyage en Sicile" — (*The original M. S. in library (C. A.).*)
- MARMOR PARIVM (PSEUDON?). — Marimora Oxoniensia ex Arundelianis. Seldenianis aliisque conflata. — *Oxoni, 1676. (Erupt. of 475. B. C.)*
- MARTINES A. M. — De situ Siciliae et insularum adjacentius. — 1580.
- MARZO (DE) G. — Biblioteca storica e letteraria di Sicilia. — Vol. I-XXVI. *Palermo, 1869-76.*
- MASCULUS J. B. — De incendio Vesuvii XVII, Kal. Januar, an. 1631, Libri X, Cum chronologia superiorum incendiorum et ephemeride ultimi. — (*Erupt. 1631*). *Neapolis, 1633, in 4^o, pp. 312, 37, pl. 2.*
- MASSA (PADRE) G. A. — Della Sicilia grand' isola del Mediterraneo in prospettiva e il monte Etna o il Mongibello esposto in veduta da un religioso della compagnia di Gesù. — *Palermo, 1708. (Cap. XVIII, cronologia degli incendi, in 4^o, pp. 126. Also, Palermo, 1709, 2 Vols. in 4^o, Pt. I, pp. 12 + 359. Pt. II, pp. 503.*
- MAUGINO F. — L'eruzione dell'Etna 1879. Lettera al prof. Ragogna. — *Ann. d. Soc. Met. Ital. Vol. II, N.° 41-44, pp. 306.*
- MAURO CIRINO. — Lentini abbattuta dai terremoti. — *Messina, 1700.*

- MAUROLYCUS F. (1464-1575). — *Cosmographia dial.* 3. — (*cit. by Massa, Etna Venetiis, 1543.*)
- MAUROLYCUS F. — *Sicaniarum rerum compendium.* — *Thes. Sic.* IV, *Messanae, 1562. Better edition by Giacomo Longo. Messanae, 1716.*
- MAZZA. — *Storia di Adernò.* — *Catania, 1820.*
- MAZZARA G. — *Poema del Mongibello.* — (*rep. by Ventimiglia. Poeti siciliani, cap. 30 (Cit. by Massa, Etna).*)
- MAZZETTI L. — 1879-1880. — *See Ba'dacci.*
- MELLONI M. — *Sulla Polarità magnetica delle lave e rocce affini.* — *Atti d. Acc. d. Sc. di Napoli, An. 1853.*
- MERCALLI G. — *Sull'eruzione Etnea del 22 marzo 1883.* — *Atti d. Soc. It. d. Sc. Nat. Vol. XXVI, Milano, 1883. in 4º, pp. 11. (C. A.).*
- MERCALLI G. — *Le ultimi eruzioni dell' Etna del 22 marzo 1883 e del 18 maggio 1886.* — *Firenze, 1887, in 4º, pp. 8 (C. A.).*
- MERCURIÓ G. A. — *Sulla salsa di Fondachello nel comune di Mascali, del fondamento parziale del cono argilloso e dell'apparizione di un'acqua minerale gasosa.* — *Catania, 1847.*
- MERCURIÓ G. A. — *Relazione della grandiosa eruzione Etnea della notte dal 20 al 21 agosto 1852.* — *Catania, 1853. Palermo, 1853, pl. 1. A short abstract in: v. Rath's Aetna, pag. 32. Also in Baltzer, pag. 38.*
- METAPHRASTUS S. — *Editio Migre.* — (*Erupt. 251, A. D.*) Vol. I, pag. 346, *Paris, 1864.*
- METAPHRASTUS S. — *Vitae Sanctorum, in Neander's Historia Ecclesiastica.* — (*Erupt. 253, A. D.*) Vol. I.
- MINASI G. — *Relazione de' Tremuoti di Sicilia — Messina, 1783 Supplemento, Messina, 1785.*
- MIRONE G. — *Sopra un'acqua minerale (Acqua Santa) nelle vicinanze di Catania.* — *Catania, 1786.*
- MIRONE G. AND PASQUALI G. — *Descrizione dei fenomeni osservati nell'eruzione dell'Etna accaduta in quest'anno 1787 e alcuni prodotti vulcanici che v'appartengono.* — *Catania, 1788, in 12º, pp. 29. (There is also the descript. of the Aurora borealis of 13 July 1787 during the erupt). French translation also.*
- MOLL H. — *Map of Italy, containing a representation of Etna, during the eruption of 1669.* — *London, 1714.*
- MOMPILERI. — *Relazione M. S. dell'eruzione del 1536.* — (*cit. by Massa.*)
- MONACO F. — *Cataclysmus aetnaeus, sive inundatio ignea Aetnae*

- montis anni 1669. — *Venetiis, 1669, in 4°, fol. 6, pp. 60, with figs.* (C. A.).
- MONGITORE A. — La Sicilia ricercata nelle cose più memorabili. — *Vol. I-II, Palermo, 1742-43, in 4° (pag. 286, Tom. II, Etna ovvero Mongibello: pag. 345 Istoria cronologica dei terremoti in Sicilia). etc.*
- MONGITORE A. — Diario Palermitano 1640-1743. — *Biblioteca de Marzo, Vol. VII, IX e XII.*
- MONGITORE A. — Cronologia de tremuoti di Sicilia. — *Palermo, 1743, in 4°*
- MONTICELLI T. AND COVELLI N. — Analisi del fango dell'Etna. — “*Biblioteca Analitica di Sc. Lett. ed Arti, Napoli, August 1823, pp. 143-148.* (C. A.).
- MONTICELLI T. E COVELLI N. — Esame chimico d'una pioggia di polvere caduta il 21 di Giugno 1822. — *Giorn. di Sicilia, N. 5, 1823.*
- MONTLÉMENT A. — Des volcans en général et plus spécialement du Vésuve et de l'Etna. — *Bull. Soc. Géol., t. XVI, Sept. 1841, pp. 137-158.* (C. A.).
- MORICAUD S. — Eruption de l'Etna en 1819. — “*Nouv. Ann. des Voyages*” 1819, t. III, pp. 455-462. (C. A.).
- MORIS A. — Account of the eruption of 1822. — *Rodwell's Etna, pag. 106.*
- MORTILLARO B. V. — Discorso su la vita, e su le opere dell'Abbate Domenico Scinà. — *Palermo, 1837, in 8°, p. 61. (Etna in 1811).*
- MUENSTER S. (1489-1552). — *Cosmographia universalis. V. lib. II, 257 et lib. I, cap. VII. Meber: “De igne in terrae visceribus flagrante. — (Description of the changes in crater of Etna since the time of Strabo, to the eruption of 1537).*
- MURABITO F. — Catania liberata dall'incendio dell'Etna del 1669 in X canti. — *Catania, 1675: (Cit. by Ferrara: Storia di Catania).*
- MURATORI. — *Annales. — Tom. V, pag. 743; Tom. VII, p. 342, Tom. X, p. 921, etc.*
- MUSUMECI M. — Sopra l'eruzione dell'Etna dell'anno 1832. — *Atti d. Acc. Gioenia, T. IX. pp. 207-218.*
- MUSUMECI M. — Sopra una colonnella nella lava. — *Opere Archeol. ed Art. Vol. I, p. 59 (Nota).*
- NARBONE. — *Bibliographia Sicula. — Palermo, 1854. (Vol. III, p. 139 descript. of Auria during the eruption of Etna, 1669).*
- NATALIS COMITIS. — *Universae historiae sui temporis libri triginta ab anno salutis 1545 usque ad annum 1581. — Acta*

- Sanct. II, p. 650. Venetiis, 1581, lib. XVII, p. 370. (Eruption, 1566).*
- NAUDÉ G. UND GIULIANI G. B. — Ueber den Vesuv und Aetna. — ? 1632.
- NEGRI F. — Pianta del Monte Etna. — (*Cit. by Massa: Etna*).
- NIGER M. — Siciliae insulae descriptio. — *Scriptores Rer. Sicul. III.*
- NOUGARET J. — Lettres écrites de la Sicile, à l'occasion de l'éruption de l'Etna. — *Moniteur, 18 mars, 26 avril 1865, pp. 32. (G. A.).*
- OBSEQUENTIS J. — Prodigiorum liber, ed O. Jhan. — (*Pp. 118 and follow. Erupt. 141, 135, 126, 122. B. C.*).
- ODELEBEN (VON) E. G. — Beiträge zur geol. Kenntniss v. Italien. — 2 Th. Freiberg, 1819.
- OLDENBOURG. — Cronologia dell'eruzioni del Monte Etna. — *Compendio delle transazioni filosofiche. Anno 1869, Venezia, 1793, pp. 1-4. (C. A.).*
- OMODEI F. G. — See Filoteo.
- ORLANDINI L. — La descrizione latina del sito di Mongibello di Ant. Filoteo degli Homodei tradotta in lingua italiana. — *Palermo. 1611, in 4°, fol. 4, pp. 87, pl. 1.*
- OROSIUS. — Lib. II, cap. XIV-XVIII; lib. V, cap. VI, X and XIII. — (*Eruptions 425, 134, 126, 122 B. C.*).
- ORTOLANI G. E. — Prospetto dei Minerali di Sicilia. — 2° ediz. *Palermo, 1809, in 8°, pp. 17-18, 30-31.*
- ORTOLANI G. E. — Prospectus of the minerals of Sicily. — 1808.
- ORTOLANI G. E. — Nuovo dizionario geografico e biografico della Sicilia antica e moderna. — *Palermo, 1819.*
- ORVILLE (COMITIS D') J. PH. — Sicula, quibus Siciliae veteris rudera illustrantur. — *In fol. Amstelodam, 1764.*
- OTTAVIO (PADRE) G. — Isag. ad hist. Sic. (Cap. XIII, N. 15. Earthquake at Etna.) — *Repeated under Cajetani Syracusani Patris Octavii. (Cit. by Mongitore).*
- OTTAVIO (PADRE) G. — Sicul. in animad. — *T. I, fol. 22. Earthquake of 1619. (Cit. by Mongitore).*
- OVIDIUS. — Metamorph. lib. XV, 340-55.
- PACICHELLI G. B. — Memorie di viaggi per l'Europa Christiana scritte a diversi in occasione dei suoi Ministeri. — *Napoli, 1685, Vols V in 12°. Parte I, pp. 40-743-53. Parte II, pp. 8-827 40; Parte III, pp. 8-761-27. Parte IV, vol. I, pp. 4-541-20. Parte V, vol. II, pp. 4-438-18. (Parte IV, vol. II, pp. 66 and follow. Del Mongibello.*
- PACICHELLI G. B. — Lettere familiari istoriche ed erudite. — *Na*

- poli*, 1695. Vols. II, in 12°. (Vol. I pp. 12-490; Vol. II, pp. 20-432-34).
- PAGLIA B. — Epigrammata in XII. Suetoni Caesaris. — *Neapoli*, 1693, in 8°, p. 200. — *Messana fugit, Aetna teritus*, pp. 65.
- PALGRAVE (SIR) F. — An account of the eruption of Mount Etna in the year 1535 from an original contemporary document communicated in a letter to J. G. Children, Esq. Secretary of the Royal Society. — *Proceed. of the Roy. Soc. of London*, Jan. 15, 1835.
- PALGRAVE F. — Sac. Dr. Children communique une lettre de Sir Francis Palgrave contenant le récit d'une éruption du mont Etna dans l'année 1535 d'après les documents originaux contemporains, trouvés parmi les papiers qui renferment la correspondance de Henry VIII avec les princes d'Italie, dans les archives de Westminster. — *L'Institut. Journ. général*. N. 5, 1835.
- PALMIERI L. — Un fatto che merita di essere registrato. — *Rend. R. Acc. Sc. Fis. Mat. An. XXV, Napoli*, 1886, pp. 125.
- PAPIN S. — Theb. XII, 274; Silv. III, I. 130.
- PARTHEY. — Wanderungen durch Sicilien u. die Levante. — 2 Th. Berlin, 1834.
- PARUTA F. — La Sicilia descritta. — In fol. (Cit. by Carrera). *Lione*, 1617.
- PASCALE V. — Descrizione storico-topografico-fisica delle isole del regno di Napoli. — *Napoli*, 1796, in 8°, pp. 138, pl. 1. (C. A.).
- PATERNIO J. — Matricula monasteriorum S. Mariae, S. Leonis. — *Catanae*, 1693, (Repeated under the name of Bartolomeo (don) a Paternione).
- PATERNÒ T. — 1669. — See *Tedeschi*.
- PATERNÒ A. — Cronaca di Sicilia. — (Cit. by Auria).
- PATERNÒ I. (Principe di Biscari). — Viaggio per tutte le antichità della Sicilia. — *Napoli*, 1781, in 4°, pp. 200. pl. 2. (C. A.).
- PENK A. — Ueber Palagonite u. Balsalttuffe. — *Zeitschr. d. Deutsch. Geol. Ges. Seit. 504. Berlin*, 1879. (Also tuffs and Palagonite of Etna).
- PERERIA A. — Die Aetna (Eruption 1879) — *Verhhl d. K. K. geol. Reichsanstalt. N.º 10*, 231. *Wien*, 1879.
- PEROU (DU). — Notice sur l'éruption de l'Etna de février 1865. — *Bull. d. l. Soc. Géol. de France. Paris*, 1866.
- PETAVIUS D. — Uranologia I, VII, e 10. — (Cit. by Massa, Etna). *Parisiis*, 1630.

- PETRARCHA F. — De Rom. pontif. et Imp. (*Eruption 1169*).
- PHILOSTRATUS. — Vita Apoll. — V, *cap. 16 and 17*.
- PHILOTHEUS. — See Filoteo.
- PIAZZA (DI) F. M. — Cronaca m. s. — (*Earthquake 1176. (Cit. by Massa, Etna)*).
- PILLA L. — Parallelo tra i tre Volcani ardenti delle Sicilie. — *Atti d. Acc. Gioenia, 1837. — Cit. Jahrb. f. Min. p. 347. Stuttgart, 1836*.
- PILLA L. — Sopra la produzione delle fiamme nei vulcani. — *Pisa, 1837, in 4° — Also: Bull. d. l. Soc. Géol. de France, VIII, p. 262; 1837, — J. Roth, d. Vesuv. S. 350. Berlin, 1837*.
- PILLA L. — Studii di Geologia. — *Napoli, 1841*.
- PILLA L. — Aggiunte al discorso sopra la produzione delle fiamme nei vulcani. — *Nuovo Cimento, Pisa, 1844*.
- PILLA L. — Sur les phénomènes volcaniques de l'Italie Méridionale. — *Mém. d. l. Soc. géol. d. France, 2^e Sér., Vol. I, page 179, 1844*.
- PILLA L. — Oritognosia e Geognosia in Italia. — *Progresso delle Scienze, Lettere ed Arti, art. of Vol. II, 3, 5*.
- PINDARUS. — Pythia. — *Ode 29 and follow*.
- PIRRO D. R. — Catanensis Ecclesiae Notitiae. — *Lib. III, Thes. Sic.*
- PIRRO D. R. — Chronologia regnum Siciliae. — *Thes. Sic. L. V. Panormi, 1643*.
- PIRRO D. R. — Sicilia Sacra. — 3^a Edition Vol. II, fol. Lugg. Bal. 1722. — *Panormi 1733. — Also: Thes. Sic. I, and II: (Annales Panormi sub annis D. Ferdinandi de Andrada archiepiscopi Panormitani, ab anno 1646). Biblioth. De Marzo. Vol. IV, pp. 58-252*.
- PISTOIA C. F. — Carta dell'Etna in rilievo per uso dell'istituto topografico militare a Firenze (colorata geol.) Scala verticale 1:25000; scala orizzontale 1:50000. — (*Constructed on the Base of the map of Sartorius von Waltershausen*).
- PLATANIA GIOV. — Les tremblements de terre de Nicolosi (Sicile). — *La Nature, 1885, II, p. 350*.
- PLATANIA GIOV. — La récente éruption de l'Etna. — *La Nature, II, 1886, pp. 97-99, map, 1, figs*.
- PLATANIA S. — Sul carbonato di Soda nativo nelle Lave dell'Etna. — *Atti d. Acc. Gioenia, Vol. VIII, Ser. 1^a, pp. 153-176*.
- PLATTNER. — Analyse des Gesteins von Serra Giannicola in Val del Bove. — *Mitgeth in Fr. Hoffmann's Beobacht, Karsten's Archiv. XIII, Seit. 702, 1839*.
- PLINIUS. — Historia natur. — II, 103, 106, and III, 8.

- POMPONII MELA. — De situ orbis II, 7. — (*Eruption of first cent. B. C.*).
- POLEMONE. — De admirabilibus Siciliae Fluminibus. — (*Cit. by Alfio Ferrara. Mem. sulle acque d. Sicilia, pag. 7, Londra, 1811.*)
- PORTAL P. — Osservazioni sopra il ferro speculare vulcanico trovato nell'Etna. — *Without locality or date, in 8º, pp. 10, (C. A.).*
- PORTIUS S. — Physiologicum opus. De Aetnae ignibus acorumque causis. — *Messinae, 1618.*
- POWER JEANNETTE. — Itinerario delle Due Sicilie riguardante tutt'i rami di storia naturale, e parecchi d'antichità che essa contiene. — *Messina, 1839, in 4º, p. VIII, 249, pl. (Etna pp. 63-82).*
- PREVOST C. — Rapport fait à l'Académie royale des sciences sur le voyage à l'île Sicilie en 1831-32. — *Paris, 1832.*
- PREVOST C. — Sur un projet d'exploration de l'Etna et des formations volcaniques d'Italie. — *Compt. Rend. Acad. Sc. t. XXXV, Paris, 1852, pp. 409-413 (C. A.).*
- PREVOST C. — Etude des phénomènes volcaniques du Vésuve et de l'Etna. — *Compt. Rend. Acad. Sc. t. XLI, Paris, 1845, pp. 794-797 (C. A.).*
- PREVOST C. — Observations géologiques en Sicile. — *Bull. d. l. Soc. Géol. de France, II, pp. 303.*
- PRIVITERA F. — Annuario Catanese. — (*Eruptions 1536-37*). *Catania, 1690.*
- PRIVITERA F. — Succinta relazione del tremuoto del 1693. — *Catania, 1694.*
- PRIVITERA F. — Dolorosa tragedia, etc. di Catania distrutta nel 1693. — (*earthquake of 1693*). *Catania, 1695, in 4º, fol. 1, pp. 98.*
- PROCOPIUS. — (Eruption, 550.) — *De bello Gothico IV, 35.*
- PROTOSPATA L. — Rerum gestarum in Regno Neapolitano ab 860-1102 Chronicon. — *Carusii. Mem. storiche.*
- PRYSTANOWSKY (VON) R. — Ueber den Ursprung der Vulkane in Italien. — *Berlin, 1822.*
- QUATREFAGES (DE). — Souvenirs d'un Naturaliste. — *Paris, 1865. Rerie des Deux Mondes T. XIX, 1847, pp. 5-36.*
- RAFFELSBERGER F. — Gemälde aus dem Naturreiche beider Sicilien. — *Mit. Kpf. Wien, 1824.*
- RAMMELSBERG K. T. — Mineralogische Gemengtheile der Laven, etc. (Aetnalava). — *Zeitschr. d. Deutsch. geol. Ges. I, 232, Berlin.*

- RAMMELSBERG K. T. — Ausbruch des Aetna 1865. — *Zeitschr. d. deutsch. geol. Ges. XIII*, pp. 606, Berlin, 1866.
- RANZANO P. — De auctore et primordiis urbis Panormi. — (Eruption 1444). — *Opusc. di autori siciliani, IX*, pag. I. Palermo, 1747.
- RATH (VOM) G. — Der Aetna in den Jahren 1863-66, nach O. Silvestri's "I fenomeni Vulcanici presentati dall'Etna negli anni, etc.". — *Übertragen in Neu. Jahrb. f. Min. Seit. 51, Stuttgart, 1870.*
- RATH (VOM) G. — Der Aetna, Vortrag gehalten am 21 Mai 1872. — *Verhandl. d. naturhistor. Vereins für Rheinl. u. Westf. 1872, in 8°, pp. 49-81.*
- RATH (VOM) G. — Referat über Silvestri's. Relazione sulla doppia eruzione del 1879. — *Verhandl. d. niederrhein. Ges. f. Nat. u. Heilkunde. Sitzungsberichte, 1879.*
- RECLUS E. — La Sicile et l'éruption de l'Etna en 1865. — *Journ. du Monde. 1^{re} Sem. pp. 353, Paris, 1866. Bibl. di Viaggi X, (La Sicilia). pp. 53, Milano, 1873.*
- RECLUS E. — La terre. — 2. Vols. Paris, 1877. (Vol. I, pp. 575. *Erupt. Etna 1856 with coloured geol. map*).
- RECUPERO G. — (1720-78). Discorso storico sopra l'acque vomitate da Mongibello e suoi ultimi fuochi avvenuti nel mese del Marzo 1755, recitato nell'Accademia degli Etnei. — *Catania, 1755, in 4°, pp. 79, pl. 1.*
- RECUPERO G. — Storia naturale e generale dell'Etna. — *Opera postuma con annotazioni del suo nipote Agatino Recupero. Tom. I-II, Catania, 1815, in fol. Vol. I, pp. XX + 244 + LXIV + 15 pl. 3, portrait. Vol. II, pp. 236 + XII + 22, map. 1, pl. 4.*
- RE L. DEL. — Relazione di una gita in Catania e all'Etna, durante l'eruzione del dicembre 1842 per eseguirvi alcune magnetiche osservazioni. Memoria. — *Atti d. Accad. d. Sc. di Napoli, 1843, in 4°, pp. 46 (C. A.).*
- REYER E. — Beitrag zur Physik des Eruptionen und der eruptiv Gesteine. — *Wien, 1877.*
- RIBIZZI. — Eruzione del 1646. — (*cit. by Recupero*).
- RICCIARDI L. — Ricerche chimiche sulle lave dei dintorni di Catania indicate nella carta geologica di Sciuto Patti. — *Atti d. Acc. Gioenia. d. Sc. Nat. Ser. 3^a, Vol. XV, Catania, 1881.*
- RICCIARDI L. — Sopra un'alterazione superficiale osservata sulla selce piromaca dei dintorni di Vizzini. — *Atti d. Acc. Gioenia, Ser. 3^a, Vol. XV. Catania, 1881.*

- RICCIARDI L. — Sulla cenere caduta dall'Etna il giorno 23 Gennaio 1882. — *Gaz. Chim. It.*, t. XII, 1882, pp. 3. (C. A.).
- RICCIARDI L. — Sulla composizione chimica di diversi strati di una stessa corrente di lava eruttata dall'Etna nel 1669. — *Gaz. Chim. Ital. T. XII*, 1882, pp. 6. (C. A.).
- RICCIARDI L. — Composition chimique des diverses couches d'un courant de lave de l'Etna. — *Compt. Rend. Acad. Paris*, pp. 3, (C. A.).
- RICCIARDI L. — Sulla composizione chimica della cenere lanciata dall'Etna il 16 Novembre 1884. — *Atti Accad. Gioenia Sc. Nat. Catania*, Ser. 3^a, Vol. XVIII, pp. 5 (C. A.).
- RICCIARDI L. — L'Etna e l'eruzione del mese di marzo 1883. — *Atti d. Acc. Gioenia, Sci. Nat. Catania*, 1885, ser. III, Vol. XVIII, pp. 195.
- RICCIARDI L. — Recherches chimiques sur les produits de l'éruption de l'Etna aux mois de mai et de juin 1886. — *Compt. Rend. Ac. Sc. Paris*, Vol. CII, pp. 1484-1488.
- RICCIARDI L. — Sull'Eruzione dell'Etna del Maggio-Giugno 1886. — *Chieti*, 1886, in 4^o, pp. 8 (C. A.).
- RICCIARDI L. — Sull'allineamento dei vulcani italiani, etc. — *Reggio-Emilia*, 1887, in 8^o, pp. 10, col. map, 1.
- RICCIARDI L. E SPECIALE S. — Ricerche chimiche sui Basalti della Sicilia. Nota preliminare. — *Atti d. Acc. Gioenia. Ser. 3^a, Vol. XV*, 1881.
- RICCIARDI e SPECIALE. — I basalti della Sicilia. — *Gaz. Chim. It. T. XI*, 1881, pp. 34 (C. A.).
- RICCIARDI L. E SPECIALE S. — Sui Basalti della Sicilia. Ricerche chimiche. — *Atti d. Acc. Gioenia, Ser. 3^a, Vol. XV, Catania*, 1881.
- RICCI G. — Rapporto a S. E. il Ministro della Guerra intorno alla misura di una base nella Piana di Catania. — *With a plate of triangulation*. Torino, 1867.
- RICCIOLI B. — Chronologia reformata Seti. — (Eruptions from 1321 to 23). — *Bononiae*, 1669.
- RICCO A. — Phénomènes atmosphériques observés à Palerme pendant l'éruption de l'Etna. — *Compt. Rend. Ac. Sc. Paris*, Vol. CIII, pp. 419-422.
- RICHARDUS (DE) S. G. — Chronicon Siculum ab anno 1189-1243. — *Carusii. Mem. storiche*.
- RIEDELSE (VON) J. H. — Reise durch Sicilien und Gross-Griechenland. Zürich. 1771. — *En français. Lausanne*, 1773, in 12^o, pp. XII + 353.

- RIO (DEL) M. — Disquisitiones magic. 1, 2 quest. 10. — (*Citt. by Massa, Etna*).
- RIOLO V. — Delle acque minerali di Sicilia. — *Palermo, 1794, in 8.º*
- RISO (DE). — Relazione della pioggia di cenere avvenuta in Calabria ulteriore nel dì 27 Marzo 1809. — *Atti d. Acc. Pontan. Napoli, 1809, pp. 23.*
- RITIUS M. — De regibus Siciliae usque ad 1497. Scriptore Sic. — *Thes. Sicul. V.*
- RITTER C. W. — Beschreibung merkwürdiger Vulkane. — *Breslau, 1847.*
- RITTER VON HAUER K. — Ueber di Beschaffenheit der lava des Etna von der eruption im Jahre 1852. — *Sitz. K. Ak. d. Wissen zu Wien. Math. Nat. T. XI, 1853, pp. 87-92, pp. 8 (C. A.).*
- ROBERTO F. DE. — L'eruzione dell' Etna. — *Rivista Mensile del Club Alpino It., 1886, N° 6.*
- RODWELL G. F. — Etna, a history of the Mountain and of its eruptions, — *London, 1878, in 8º, pp. XI + 142, maps. and pl.*
- ROMUALDI. — Salernitani (Archiep.). — *Chronicon, postrema pars ab anno 1159-77; ex Bib. J. B. Carovi. Carusii. Mem. storiche. (Eruption 1169 A. D.). Panormi, 1723.*
- ROSENBUSCH H. — Referat über die eruption des Aetna 1879. — *Neu. Jahrb. f. Min. Geol. u. Pal. I, Seit. 390. Stuttgart. 1880.*
- ROSSI (DE) M. S. — Terremoti presso l'Etna dal 7 al 20 Gennaio 1875. — *Bull. d. Vulcan. Ital. An. II, fasc. I, II, III. — Bull. d. R. Comit. Geol. d'Italia. Vol. VI, pag. 113. Roma, 1875.*
- ROSSI (DE) M. S. — Insegnamento di fisico-chimica terrestre nella R. Università di Catania ed Osservatorio Vulcanologico nell'Etna. Lettera di M. S. de Rossi al Prof. Orazio Silvestri. — *Bull. d. Vulcan. Ital. An. VI, fasc. I-III, p. 5, Roma, 22 Gennaio, 1879.*
- ROTH J. — Lyell's Abhandlung (siehe diese) übersetzt. — *Zeitschr. d. Deutsch. geol. Ges. Bd. XI, Seit. 149, Berlin, 1859.*
- ROTH J. — O. Silvestri. Ueber die vulkanischen Phänomene des Aetna in den Jahren 1863-66, mit besonderer Bezugnahme auf den Ausbruch von 1865. — *Atti Accad. Gioenia, Catania. Ser. 3ª, 1867, t. I, pp. 56-285 und, Zeits. d. D. geol. Gesells. 1869, t. XXI, pp. 221-238 (C. A.).*
- ROTH J. — Ueber die Ausbrüche des Aetna im Nov. u. Dec. 1868,

- von Mar. Grassi (übersetzt). — *Zeitschr. d. Deutsch. geol. Ges. Bd. XXII, Seit. 189, Berlin, 1870.*
- ROTH J. — Ueber Vesuv u. Aetnalaven. — *Zeitschr. d. Deutsch. geol. Ges. Bd. XXV, S. 116. Berlin, 1873.*
- ROTH J. — Der Ausbruch des Aetna am 26 Mai (nach) Silvestri Baldacci etc. — *Zeitschr. d. Deutsch. geol. Ges. Bd. XXXI, Seit. 398. Berlin, 1879.*
- ROZET. — Mém. sur les Volcans de l'Auvergne avec un appendice sur les Volcans d'Italie. — *Paris, 1844.*
- RUFFO S. — Istoria dell'orrendo terremoto accaduto in Palermo 1 Settembre 1726. — *Palermo, 1726, in 4.^o*
- RUSSEGGER J. — Reise in der Levante u. in Europa mit besonderer Berücksichtigung der naturwis. — *Verhältnisse der betreff. Ländern. Stuttgart, 1851. (Reise in Sicilien. Seit. 255-363).*
- RUSSO A. — Manoscritto che possiede don Ludovico Toscano di Aci Reale. — (*Cit. by Recupero II, p. 58.*) *Eruptions 1651-53.*
- RUSSO (GRASSI) G. — Acqua di Santa Venera — *Aci Reale, 1878. — Traduction français par Ingigliardi. Lyon, 1878.*
- RUTLEY F. — The mineral constitution and microscopic characters of some of the lavas of Etna. (*Rodwell's Etna pp. 135, London, 1878.*
- SACCO F. — Dizionario geografico del Regno di Sicilia. — *Vol. I-II. Palermo, 1790, in 4.^o*
- SAINTE-NON. — *See De Saint Non.*
- SAITTA L. — Sul miserando caso della esplosione avvenuta addi 25 Nov. 1843. — *See, Luca P. de.*
- SALIS-MARSHLINS (VON) K. U. — Beiträge zur natürlichen u. ökonomischen Kenntniss beider Sicilien. — *2 Bde. Zürich, 1790.*
- SANCHEZ G. — La Campania sotterranea, e brevi notizie degli edifici scavati entro Roccia nelle Due Sicilie, ed in altre Regioni. — *Napoli, 1833. Vols. II, in 8. pp. 2-656. See pp. 78 and follow. Etna.*
- SARTORIUS VON WALTERSHAUSEN W. — Atlas des Aetna. — *Vollst. in 8^o, Lief. u. zugehörigem. Text. Imp. fol. m. 57. Kpfrt/n Weimar, 1848-64*
- SARTORIUS VON WALTERSHAUSEN W. — Ueber die vulkan. — *Gesteine in Sicilien. u. Island. und ihre submarine Umbildung. Göttingen, 1853.*
- SARTORIUS VON WALTERSHAUSEN W. — Ueber den Aetna u. seine Ausbrüche. — *Leipzig, 1857, in 8^o, pp. 23.*
- SARTORIUS VON WALTERSHAUSEN W. UND LASAULX (VON) A. — Der

- Aetna. — II, *Band. Leipzig, 1880, in fol. Vol. 1, pp. XVIII + 371, map. 1, pl. 14, portrait e figs. Vol. II, pp. VIII + 540, 1 map. pl. 23 and figs.*
- SAUSSURE (DE) H. B. — Voyages. — Vols IV, Genève, 1779-96, in 4.^o
- SAUSSURE (DE) H. — Sur la récente éruption de l'Etna. — *Compt. Rend. d. l' Acad. d. Sc. Vol. LXXXIX (1879). p. 35. — Journ. de Genève, Juin 1878. — Abstract in: Bull. d. R. Com. Géol. d'Italia, Vol. X, p. 323. Roma, 1879.*
- SAUSSURE H. DE. — L'Etna et ses dernières éruptions. — *Le Globe, 4^e sér. Vol. VII, pp. 211, Genève, 1888.*
- SAVA R. — Sull'accidentale arsione umana per l'eruzione dell'Etna 1843. — *Rend. d. R. Acc. d. Sc. di Napoli, N. 12, 1843.*
- SAVA R. — Lucubrazioni sulla Flora e Fauna dell'Etna e sopra l'origine delle spelonche delle lave di questo Vulcano. — 6.^o *Congr. scient. ital. Milano, 1844, in 8^o, pp. 36.*
- SAVA R. — Sopra alcuni prodotti minerali che si formano in una spelonca dell'Etna. — *Ann. Civ. d. Due Sicilie. Fasc. LX, Vol. XXX, pp. 89-102.*
- SAVERIO C. — De Aetna. — (*Poème cit. by Mongitore*).
- SAYVE A. — Voyage en Sicile, fait en 1820 et 1821. — *Bibl. Univ. Paris, 1822, t. XX, pp. 131-158, t. XXI, pp. 128-160. (C. A.).*
- SCANELLO C. — Descrizione di Sicilia. — (*Eruption 1536. (Cit. by Filoteo and Massa).*
- SCASSO M. — 1786. — *See Burigny.*
- SCHMIDT J. F. — Vulkanstudien. — *Aetna, 1870, Leipzig, 1878, in 8^o, fol. 4, pp. 235, map 1, pl. 7.*
- SCHOTT G. (1608-66). — *Magia universalis naturae et artis IV, — Herbipoli, 1657, in 4^o. — In German, Bamberg, 1671, in 4^o. — Frankfort a. M. 1677. (l. I, cap. X et a., cit. by Massa, Etna).*
- SCHOUN J. F. — Observations météorologiques sur le mont Etna. — *Bibl. univer. d. Sc. et Arts de Genere, XII, p. 153.*
- SCHOUN J. F. — L'ultima eruzione dell'Etna 1819. — *Giorn. enciclop. di Napoli, 1819. Goetting. Wochenblatt. 18 t. Wocke 1819, pp. 71-75.*
- SCIACCA E. — Eruzione dell'Etna del 1669. — *Napoli, 1671, in 8^o (Cit. by Gemellaro C. in: Origine e progressi delle scienze naturali in Sicilia, Catania 1833).*
- SCIGLIANO A. — Posnona Etnea. — *Atti d. Acc. Gioenia VIII. Catania, 1831.*
- SCINÀ D. — (Palermitano trovandosi in Catania. Copia di lettera

- scritta ad un suo amico 2 Nov. 1811. — (*Eruptions October 1811*). *Catania, 1811.*
- SCIUTO-PATTI C. — Della utilità del Drenaggio in talune terre della Pirna di Catania. — *Atti d. Soc. Econ. d. Prov. di Catania. 1857.*
- SCIUTO-PATTI C. — Sull'età probabile della massa subaerea dell'Etna. — *Atti d. Acc. Gioenia. Ser. 3^a, Vol. I, Catania, 1866, pp. 30.*
- SCIUTO-PATTI C. — Carta geologica della città di Catania e dintorni di essa. — *Con 8 tav. Atti d. Acc. Gioenia. Ser. 3^a, Vol. VII. Catania 1880. — (Notice in: Atti d. Soc. Ital. d. Sc. Nat. Milano, Agosto 1869).*
- SCIUTO-PATTI C. — Sulla temperatura del mare nel Golfo di Catania. — *Atti d. Acc. Gioenia. Ser. 3^a, Vol. IV, Catania, 1869.*
- SCIUTO-PATTI C. — Carta idrografica della città di Catania e dintorni, — *Atti d. Acc. Gioenia. Ser. 3^a, Vol. XI. Catania, 1878.*
- SCIUTO-PATTI C. — Sul sito dell'antica città di Symaectus. — *Atti d. Acc. Gioenia d. Sc. Nat. Ser. 3^a, Vol. XV, Catania, 1880.*
- SCROPE G. P. — Volcanoes. The character of their phenomena. — *London, 1862, in 8^o, Chap. Sicily, mount Etna and isole Lipari. — Translated from English by Endymion, in 8^o, Paris 1864. — Uebersetz von G. A. von Klöden, Berlin, 1872.*
- SCROPE G. P. — On the mode of formation of volcanoes and craters. — *Quarterly Journ. of the Geol. Soc. 1859. London. 1859. — Edit. française avec addition, Paris 1860. — Ins Deutsche übertragen v. C. L. Griesbach. Berlin, 1873.*
- SCUDERI R. — Sopra i segni meteorologici dell' Etna. — *Atti d. Acc. Gioenia, 1, 2. Catania, 1824.*
- SECCHI P. A. — Lezioni di fisica terrestre. — *Torino e Roma, 1867.*
- SEGUENZA A. G. — Di certe rocce vulcaniche interstratificate fra rocce di sedimento. — *Nota ove è illustrata una serie stratigrafica di Salice nella provincia di Messina nella quale s'incontrano materiali vulcanici delle isole Eolie interstratificati nel pliocene antico. (Astiano). Rend. d. R. Acc. d. Sc. Fis. e Mat. di Napoli. Adunanza del 13 maggio 1876.*
- SERVAGGIO M. — Descriptio Montis Aetnaei cum horrendis emanationibus ignium a retro seculis usque da tempora nostra — *Venetis, 1541, in 12^o. It is Chap. XLIII, of: De partibus Mundi etc., Venetiis 1542.*

- SELVAGGIO M. — Colloquium trium Peregrinorum. — (Pp. 143. *earthquake 1169*). (Cit. by Mongitore and Massa, *Etna*, *ibid.* *Cronaca Siciliana*).
- SENECA. — Quast. natural. — II, I; *epist.* 51 et 79; *de benefec.* III, 37, 2; VI, 36, 1.
- SERPETRO N. — Mercato delle Meraviglie, ovvero Istoria Naturale. — *Venezia*, 1653.
- SERPETRO N. — Trattato della Geografia dell' Etna. — (Cit. by Massa, *Etna*). Not Edited.
- SETO. — Opera chronologica. — (For the "*Chronologia reformata auctore Joanne Baptista Riccioli*." See Riccioli).
- SEVASTA F. — Istoria dell'orrendo terremoto di Sciacca nell'anno 1727; colla relazione di altri terremuoti. — *Palermo*, 1729, in 8.^o
- SICKLER. — Aetna. — *Allg. Encyclop. d. W. u. k.* 2^a, pp. 123-135, pl. 1, representing the panorama of Etna of Gemmelaro (C. A.).
- SIEGERT. — Panorama des Etna und der umliegenden Gegend. — *Breslau*, 1822, in 8^o, pp. 8, pl. 1. (C. A.).
- SILIUS ITALICUS. — *Lib.* XIV, 59 and follow.
- SILLIMAN B. — An Excursion on Etna. — *Am. Journ. of Sc.* 2nd Ser. Vol. XIII, N.^o 38, 1852, pp. 175-184 (C. A.).
- SILVESTRI O. — Analisi chimica di un prodotto minerale di un vulcano spento della Toscana. Studiato in paragone a un prodotto analogo dell' Etna. — *Atti d. Acc. Gioenia*, Ser. 2^a, Vol. XIX, *Catania*, 1864.
- SILVESTRI O. — Sulla eruzione dell' Etna nel 1865. Prima relazione al Prefetto della Provincia. — *Catania*, 1865. *Giornale della Provincia di Catania*.
- SILVESTRI O. — Sopra i terremoti dell' Etna nel 1865. Relazione al Prefetto della Provincia. — *Catania* 1865. — *Compt. rend. d. l'Acad. d. Sc. Paris*, 31 Juillet 1865.
- SILVESTRI O. — Sur l' éruption actuelle de l' Etna. Lettres à M. Sainte-Claire Deville. — *Compt. rend. d. l'Acad. d. Sc. Tom. XLI, Paris*, Juill. 1865.
- SILVESTRI O. — Découverte du Vanadium dans les laves l' Etna. — *Journ. de Minér. et Géol. de W. Delesse, Paris*, 1866.
- SILVESTRI O. — Le salse e la eruzione fangosa di Paternò in Sicilia incominciata a dì 7 febbraio 1866. Ricerche chimico-geologiche. — *Catania*, 1866.
- SILVESTRI O. — Relazione scientifica sugli ultimi fenomeni vulcanici presentati dall' Etna fatta al Congresso della Società italiana di scienze naturali, tenuto alla Spezia nell' autunno

1866. — *Atti d. 2ª Riun. Straord. d. Soc. ital. d. Sc. Nat. Vol. IX, Fasc. I, 1866.*
- SILVESTRI O. — Sur une récente éruption boueuse des Salses de Paternò en Sicile. — *Compt. rend. d. l' Acad. d. Sc. Paris, 12 mars 1866.*
- SILVESTRI O. — Sui fenomeni eruttivi dell' Etna nel 1865. Studi chimici e geologici. — *Nuovo Cimento, Tom. XXI e XXII. Febbraio-marzo, Pisa, 1866-67.*
- SILVESTRI O. — Tremblement de terre de la Sicile en 1866. — *Compt. rend. d. l' Acad. d. Sc. Paris, 1866.*
- SILVESTRI O. — I fenomeni vulcanici presentati dall' Etna nel 1863 1864-65-66 in rapporto alla grande eruzione del 1865. Studi di chimica geologica. — *Vol. I, Tar. V, e fotografie. Atti d. Acc. Gioenia, Ser. 3ª, Vol. I, Catania, 1867.* — *Abstract: Zeitschr. d. Deutsch. geol. Gesellschaft. (Von Prof. J. Roth). Berlin, 1869.* — *Neues Jahrbuch für Min. Geol. u. Pal. (Von Prof. G. vom Rath in Bonn.) Stuttgart 1866;— Verhandl. der K. K. geol. Reichs. (Von Prof. F. v. Hauer.) N. 15, Wien, November 1868.* — *Zeitschr. der Deut. geol. Gesell. (Von Prof. A. Heim. Zürich), Berlin, Nov. Dec. 1871. Jan. 1872.*
- SILVESTRI O. — Proposta di un' Osservatorio sull' Etna in servizio alla Vulcanologia e Meteorologia. Presentata manoscritta al R. Ministero della Pubblica Istruzione. — *See note at pag. 112 of "I fenomeni vulcanici presentati dall' Etna, etc."*
- SILVESTRI O. — Fenomeni eruttivi Etnei in seguito alla eruzione scoppiata il 27 novembre 1868 dal cratere centrale. Relazione. — *Gazz. d. Provincia d. Catania, N.º 147, Dicembre 1868.*
- SILVESTRI O. — Sull'eruzione dell' Etna del 27 novembre 1868 dal cratere centrale. Relazione. — *Catania, 30 novembre 1868, Gazz. Piemontese. N. 342. Torino, 10 dicembre 1868.*
- SILVESTRI O. — Processi chimici e di dissociazione studiati nella lava fluente e nei fumajoli a elevatissima temperatura sul cratere centrale dell' Etna nel 1868. Lavoro comunicato al Congresso della Società italiana di Scienze naturali tenuto in Catania nell'agosto 1869. — *Atti d. Soc. d. Sc. Nat. Vol. XII, Fasc. III. Milano, 1870.*
- SILVESTRI O. — Osservazioni fatte sull' Etna in compagnia della spedizione scientifica inviata in Sicilia dal Governo inglese in occasione dello Ecclisse totale di Sole del 22 dicembre 1870. — *Atti d. Acc. Gioenia, Ser. 3ª, Vol. VI, Catania, 1871.*

- SILVESTRI O. — Notizie sopra un nuovo minerale dell'Etna. — *Miner. Mittheil. V. G. Tschermak. Heft. I, Seit. 54. Wien 1872.*
- SILVESTRI O. — Sopra due sorgenti di acqua minerale salino-solfurea idrocarbureta, detta di S. Venera, alla base orientale dell'Etna. Ricerche chimico-geologiche. — *Atti d. Acc. Gioenia, Ser. 3^a, Vol. VIII, Catania, 1872, pt. 2.*
- SILVESTRI O. — Ambrogio Soldani e le sue opere: (con osservazioni del Soldani sulle sabbie dell'Etna). Discorso fatto nella R. Accademia dei Fisiocritici a Siena in occasione del Congresso della Società italiana di Scienze naturali. — *Atti d. Soc. ital. d. Sc. nat. Vol. X, Fasc. IV, Milano, 1873.*
- SILVESTRI O. — Sulle sorgenti idrogassose di S. Venera al Pozzo. — *Catania, 1873.*
- SILVESTRI O. — Emissione di fumo eruttivo straordinario dal cratere centrale dell'Etna. — *Bull. d. Vulc. Ital. Fasc. II, e III, pp. 44, Roma, 1874.*
- SILVESTRI O. — Fenomeni eruttivi dell'Etna nell'interno del cratere centrale. (Col presagio di una prossima grande eruzione laterale). — *Bull. d. R. Com. geol. d'Italia, Pag. 244, An. VI, Roma, 1874. — Bull. d. Vulc. Ital. Fasc. VI, e VII, pp. 73, Roma, 1874.*
- SILVESTRI O. — Eruption dans l'intérieur du cratère central de l'Etna. — *Revue Savoisienne 15 Sept. (Abstract by M. Boltshauser).*
- SILVESTRI O. — Sulla eruzione laterale dell'Etna scoppiata il 29 Agosto 1874. Relazione. — *Bull. d. R. Com. geol. d'Italia, Ann. V, pag. 244, Roma, 1874. — Bol. d. Vulcan. Ital. Fasc. IX e X, pp. 105, Roma, 1874.*
- SILVESTRI O. — Terremoti presso l'Etna e conati eruttivi del medesimo dal 7 al 20 gennaio 1875. — *Boll. d. Vulcan. Ital. Fasc. I, II e III, pp. 19, Roma, 1875.*
- SILVESTRI O. — La scombinazione chimica (dissociazione) applicata alla interpretazione di alcuni fenomeni vulcanici. Sintesi ed analisi di un nuovo composto minerale dell'Etna e di origine comune nei vulcani. — *Gazz. Chim. ital. Tom. V, Paterno, 1875. — Journ. of the Ch. Soc. N. 158, February 1876. — Atti d. Acc. Gioe. Ser. 3^a, Vol. X, Catania, 1876.*
- SILVESTRI O. — Das Vorkommen des Stickstoffeisens unter den Fumarolen-Produkten des Aetna, und künstliche Darstellung dieser Verbindung. — *Uebersetz aus den Atti d'Acc. Gioenia, durch G. vom Rath. — Pogged. Ann. 1876.*
- SILVESTRI O. — Sopra due grandi perdite che ha fatto la vulca-

- nologia. Cenni sulla vita scientifica e sulle opere di C. Sainte-Claire Deville e W. Sartorius v. Waltershausen. — *Boll. d. Vulcan. ital. Fasc. XI e XII, pp. 179, Roma, 1876.*
- SILVESTRI O. — La scienza della terra. Discorso d'inaugurazione al corso di Chimico-fisica terrestre, Mineralogia e Geologia nella R. Università di Catania nell'anno 1877. — (*After the foundation of the chair of terrestrial physics and chemistry with special application to the vulcanology of Etna*). Catania, 1877.
- SILVESTRI O. — Sopra alcune paraffine ed altri carburi d'idrogeno omologhi che trovansi contenuti in una lava dell'Etna. — *Atti d. Acc. Gioenia, Ser. 3^a, Vol. XII, Catania, 1876.* — *Vorträge und Mittheilungen von G. vom Rath, Bonn, 1877.* — *Sitzungsber. der Niederrhein. Gesellsch. f. Natur. und Heilkunde in Bonn. Sitz. d. 18 febr. 1877.*
- SILVESTRI O. — Importante eruzione di fango comparsa a Paternò nelle adiacenze dell'Etna ai primi dicembre 1878. — *Boll. d. Vulcan. ital. Vol. V, pag. 131, Roma, 1878.*
- SILVESTRI O. — I Terremoti di Mineo, in Provincia di Catania, dell'ottobre e novembre 1878 accompagnati da singolari fenomeni di rombi. Relazione presentata al Prefetto della Provincia (in commissione col Prof. Boltshauser. — *Catania, novembre, 1878.*
- SILVESTRI O. — Cronaca dei fenomeni etnei del 1878-1879. Osservazioni meteoriche fatte nelle stazioni presso le Alpi e gli Apeninni, pubblicate per cura del Club Alpino Italiano. — *Ann. VIII, Torino, 1878-79.*
- SILVESTRI O. — Andamento della eruzione fangosa di Paternò nelle adiacenze dell'Etna in data del 14 gennaio 1879. — *Boll. d. Vulcan. ital. pag. 30, An. VI, Roma, 1879.*
- SILVESTRI O. — Atlante di grandi fotografie sulla eruzione ed effetti dei terremoti dell'Etna nel 1879. — *Diretto e pubblicato per cura del R. Governo Italiano, Catania, 1879.*
- SILVESTRI O. — Continuazione della eruzione fangosa a Paternò nelle adiacenze dell'Etna e sua fase in data del 20 dicembre 1878. — *Boll. d. Vulcan. ital. An. VI, pp. 28, Roma, 1879.*
- SILVESTRI O. — Fenomeni dell'Etna successivi all'ultima eruzione del maggio-giugno 1879. — *Boll. d. Vulcan. ital. An. VI, pp. 118, Roma, 1879.*
- SILVESTRI O. — Il nuovo monte Umberto-Margherita comparso in 5 giorni sull'Etna durante la eruzione del maggio-giugno 1879. — *Illustr. Ital. di Trèves, Sem. 2^a, pp. 309, con incisioni, Milano, 1879.*

SILVESTRI O. — La doppia eruzione dell'Etna scoppiata il 26 maggio 1879. Relazione ai Ministri di Istruzione pubblica, Agricoltura, Industria e Commercio, pubblicata il 30 maggio 1879, con una carta topogr. — *Catania*, 1879. — *Boll. d. Vulcan. ital.* 1879 *An. VI, Fasc. IV-VII, pag. 67, Roma*, 1879. — *Sitzungs-Bericht der Niederrh. Gesell. für Nat. und Heilkunde zu Bonn*, 1879. — *Vorträge und Mitth. von G. vom Rath*, 1880.

SILVESTRI O. — L'attuale eruzione di fango, termale, salato, petrolifero dell'Etna presso Paternò. — *Illustrazione Ital. di Trères N. 8, Descrizione con figura 23 febbraio*, Milano, 1879.

SILVESTRI O. — Sulla doppia eruzione e i terremoti dell'Etna nel 1879 2ª ediz., ampliata del primo rapporto presentato al R. Governo. — *Catania*, 1879, *pt 1.* — *Abstract: Boll. d. R. Com. geol. d' Italia, Vol. X, pp. 590, Roma*, 1879. — *Sitzber. der Niederrh. Gesell. für Nat. und Heilk. zu Bonn*, 1879. — *Vorträge und Mitth. von G. vom Rath*, 1880.

SILVESTRI O. — Sulla eruzione dell'Etna del 1879. — Tre incisioni sopra disegni originali fatti sul teatro eruttivo e che rappresentano: 1° Un gruppo di bocche eruttive formatosi a 1950 metri di altitudine sul livello del mare alla base del Monte Nero. — 2° Eruzione dell'Etna sul fianco nord-nord-est osservato da Randazzo la notte del 28 maggio a ore 3 ant. — 3° Fenditure ed avvallamenti di suolo che fanno capo alle bocche eruttive situate tra il Monte Timparossa e il Monte Nero. — *Illustr. Ital. Sem. 2º, pp. 5, Milano*, 1879.

SILVESTRI O. — Sulla eruzione di fango a Paternò nelle adiacenze dell'Etna dal suo principio fino alla data del 25 maggio 1879. — *Relazioni al Giorn. d. Sicilia, N. 304, 25 dicembre 1878.* — *N. 314, 25 dicembre 1878.* — *N. 18, 15 gennaio 1879.* — *N. 56, 8 aprile 1879.* — *N. 146, 20 maggio 1879.*

SILVESTRI O. — Un viaggio all'Etna. Vol. I, con la descrizione storica, topografica, geologica, altimetrica e pittoresca del grande vulcano, con una carta topografica e un'appendice con le norme e tariffe per i viaggiatori all'Etna, stabilite dalla Sezione catanese del Club Alpino Italiano. — *Torino-Roma-Firenze*, 1879, in 16º, *map 1.*

SILVESTRI O. — Continuazione della eruzione fangosa di Paternò e sulle condizioni attuali dell'Etna. (25 dicembre 1879). Lettera diretta da O. Silvestri al Prof. Luigi Palmieri, direttore dell'Osservatorio Vesuviano. — *Boll. d. Vulc. ital. An. VII, pp. 9, 1880.*

- SILVESTRI O. — Fenomeni vulcanici dell'Etna avvenuti dal gennaio a tutto aprile 1880. — *Boll. d. Vulcan. ital. An. VII, pp. 80-83. Roma, 1880.*
- SILVESTRI O. — Fenomeni vulcanici dell'Etna nel maggio e giugno 1880. — *Boll. d. Vulcan ital. Vol. VII, p. 86. Roma, 1880.*
- SILVESTRI O. — Programma per il XIII congresso degli Alpinisti italiani da tenersi a Catania il 15 settembre 1880 con ascensione all'Etna. — *Catania, 1880, Boll. d. Club Alp. ital. Torino, 1880.*
- SILVESTRI O. — Sullo sfeno trovato per la prima volta tra i prodotti minerali dell'Etna. — *Riv. scient. e industr. di G. Vi-mercati, N. 12, Firenze, giugno 1880.*
- SILVESTRI O. — Cronaca della eruzione di fango a Paternò e dei fenomeni vulcanici generali dell'Etna durante l'anno 1880. An. IX, 1879-80. — *Osservazioni meteorologiche fatte nelle stazioni presso le Alpi e gli Appennini e pubblicate per cura del Club Alpino Italiano, Torino, 1880. — Boll. d. Vulcan. ital. Fasc. III. Roma, 1881.*
- SILVESTRI O. — Continuazione del periodo eruttivo (con eruzione di fango) presso Paternò e cronaca dei fenomeni vulcanici generali dell'Etna durante l'anno 1881. — *Boll. dec. dell'assoc. meteorol. Ital. An. X. Torino, 1880-81. — Boll. d. Vulcan. ital. Roma, 1881.*
- SILVESTRI O. — I fenomeni vulcanici presentati dall'Etna dal 1866 al 1881. Studi di geologia chimica, (Sequel to « I fenomeni presentati dall'Etna 1863 al 1866. » which appeared in 1867). — *Accademia Gioenia di scienze naturali, seduta del 20 marzo 1881, Vol. XVII.*
- SILVESTRI O. — Nota preliminare sopra un lavoro in corso di esecuzione riguardante la Petrografia e Mineralogia micrografica delle rocce eruttive dell'Etna e in generale della Sicilia. — *Boll. d. R. Com. geol. d'Italia. Roma 1881.*
- SILVESTRI O. — Progetto di una rete sismica estesa dal centro alla periferia dell'Etna con a capo l'Osservatorio centrale a 3000 metri di elevazione e l'Istituto vulcanologico di Catania a 10 metri sopra il mare. Presentato al R. Ministero di Agricoltura, Industria e Commercio nel 1881. — *Giorn. d. Sicilia. N. 137, Palermo, 20 maggio 1881.*
- SILVESTRI O. — Ricerche chimiche sulla composizione dell'acqua minerale acidulo-alcalina, magnesiaco-ferruginosa (conosciuta col nome volgare di acqua grassa) delle sorgenti idrogassosa di Paternò alla base occidentale dell'Etna, 3^a memoria per

- servire ad un'opera completa di Idrologia generale dell'Etna sotto il punto di vista della chimica geologica, -- *Atti d. Acc. Gioenia, Vol. XVI, pp. 89, pl. 2, map. 1, table 1, Catania, 1881.*
- SILVESTRI O. — Sopra una singolare lava Basaltica di Paternò nelle adiacenze dell'Etna con piccole geodi ripiene di parafina cristallizzata. (In appendice alla Memoria « Sopra alcune paraffine ed altri carburi, etc. »). — *Boll. d. R. Com. geol. d'Italia, Vol. II, Roma, 1881.*
- SILVESTRI O. — Album fotografico di 12 fotografie che riproducono i fatti più caratteristici della eruzione suddetta. — *Catania, 1883.*
- SILVESTRI O. — Sulla eruzione dell'Etna scoppiata il 22 marzo 1883. Rapporto al R. Governo. — *Catania, 1883, map 1.*
- SILVESTRI O. — Sopra una particolare specie di quartzite semivetrosa, contenuta nell'interno di alcune bombe proiettate dall'Etna nella eruzione del 22 marzo 1883. — *Atti Acc. Gioenia, Ser. 3, Vol. XVII, Catania, 1884.*
- SILVESTRI O. — Sulla esplosione eccentrica dell'Etna avvenuta il 22 marzo 1883 e sul contemporaneo parossismo geodinamico-eruttivo. — *Catania, 1884 in 4^o, pp. 195, pl. VI, map 1. (C. A.).*
- SILVESTRI O. — Fenomeni Etnei. — *Boll. Soc. Meteor. II., Vol. V, Torino, 1885.*
- SILVESTRI O. — I terremoti di Nicolosi avvenuti nel settembre e ottobre 1885. — *Boll. Soc. Meteor. II. Vol. V, Torino, 1885.*
- SILVESTRI O. — Sulla esplosione Etnea del 22 marzo 1883, in relazione ai fenomeni vulcanici presentati dall'Etna durante il quadriennio compreso dal genn. 1880 al dec. 1883. — *Atti Acc. Gioenia Sc. Nat. Catania, 1885, ser. III, Vol. XVIII, pp. 237.*
- SILVESTRI O. — Der letzte Ausbruch des Aetna. Brief des Prof. O. Silvestri in Catania au Prof. E. Suess in. Wien. — *Neue Freie Presse, Wien, 10 juli, 1886.*
- SILVESTRI O. — Fenomeni geodinamici e vulcani osservati nella regione dell'Etna e nel rimanente del suolo Siciliano durante l'anno 1885. — *Annuario Soc. Meteor. II. Torino, 1886.*
- SILVESTRI O. — La recente eruzione e i danneggiati dell'Etna. — *Nuova Antologia, fasc. XIII, Roma, 1886.*
- SILVESTRI O. — Observations sur les phénomènes éruptifs de l'Etna depuis le 18 mai jusqu'au 7 juin 1886. — *Bull. Soc. Sc. Flammariion, Marseille, 1886. 2^{me}.An. p. 97.*
- SILVESTRI O. — Sulle acque che circolano e scaturiscono nella

- regione dell'Etna. Ricerche di chimica-geologica. Monografia IV. Acqua potabile detta Reitana presso Acireale. — *Atti Accad. Gioenia, Ser. 3, Vol. XIX, Catania, 1886.*
- SILVESTRI O. — Sulle eruzioni centrale ed eccentrica dell'Etna del maggio-giugno, 1°. Rapporto al R. Governo. — *Catania, 22 maggio 1886, with map.* — IDEM. — 2. Rapporto, 12 giugno 1886. 2ª Edizione dei due detti Rapporti. — *Catania.*
- SILVESTRI O. — Sunti di fatti più rimarchevoli dell'eruzione dell'Etna del maggio-giugno 1886. — *Boll. Soc. Geograf. It. ser. II, Vol. XI, Roma, 1886. Also in Annuar. Meteor. It. 1886.*
- SILVESTRI O. — Sur l'éruption de l'Etna de mai et juin 1886. Lettre à M. Daubrée. — *Compt. Rend. Ac. Sc. Paris, 1886. Vol. CII, pp. 1589-1592.*
- SILVESTRI O. — Etna, Sicilia ed isole vulcaniche adiacenti, sotto il punto di vista dei fenomeni eruttivi e geodinamici presentati durante l'anno 1888. — *Atti Acc. Gioenia, Sc. Nat. S. IV, Vol. I, Catania, 1888.*
- SILVESTRI O. — Etna, Sicilia nel 1887 sotto il punto di vista dei fenomeni eruttivi e geodinamici — *Annuario Met. It. Anno III, Torino, 1888.*
- SILVESTRI O. — La recente eruzione dell'Etna. — *Firenze?*
- SILVESTRI O. BLASERNA P. E GEMELLARO G. G. — Sulla eruzione dell'Etna del 26 maggio 1879 e successivi terremoti. Relazione della Commissione nominata dai Ministri di Agricoltura Industria e Commercio e della Pubblica Istruzione per lo studio della eruzione dell'Etna del 26 maggio 1879; pubblicazione fatta dal R. Governo. — *Roma, luglio 1879.* — See also: *Boll. d. R. Com. geol. d'Italia, Vol. X, pag. 309. Roma, 1879.*
- SIMON L. — A Tour in Italy and Sicily. — *London, 1828. (Eruption of Etna).* — *Neu Jahrb. f. Min. Geogn. u. Geol. pp. 358, 1833.*
- SINCELLO G. — Chorographia. — *Tip. Reg. pag. 257, Paris, 1652, (Eruption of Etna).*
- SIRUGO. — 1835-1837-1838. — See *Interlandi.*
- SMYTH W. H. — Carta generale dell'isola di Sicilia, compilata, disegnata ed incisa nell'ufficio topografico di Napoli sui migliori materiali esistenti e sulle recenti operazioni fatte dal Cav. G. E. Smyth. — *Napoli, 1814.*
- SMYTH W. H. — A descriptive memoir of the resources, inhabitants and hydrography of Sicily. — *London, 1824, in 4.º (with plate).*
- SOLDANI A. — Testaceographia ac Zoophytographia parva et micro-

- scopica. — *Tom. I, and II, in fol. Senis, 1789-98. (Tom. II, Cap. II, Volcanic sand of Etna.)*
- SOLINUS J. — Polyhistoria. — *Cap. XI, und Collectanea Rerum memorabilium, recog. Th. Mommsen, pag. 54.*
- SOMMA AGAT. (Di) — Historico racconto dei Terremoti della Calabria dell'anno 1638-41. — *Napoli, 1641.*
- SOMMA ANT. — Osservazioni vulcanologiche sulle fenditure esistenti in Mascalucia volgarmente chiamate Cavòli. — *Atti d. Acc. Gioenia, Ser. 1^a, Vol. XVI, 1839.*
- SOMMA ANT. — Sul luogo e tempo in cui avvenne l'eruzione dell'Etna appellata dei Fratelli Pii. — *Atti d. Acc. Gioenia, XX, pp. 59, Catania, 1843.*
- SOMMA ANT. — Sopra le stratificazioni alluviali del Fasano. — *Catania, 1845.*
- SPALLANZANI L. — Viaggi alle due Sicilie e in alcune parti dell'Appennino. — *Vol. I-IV, Pavia, 1792. In German Bd. I-VIII. Leipzig, 1794-96.*
- SPALLANZANI L. — Travels in the two Sicilies and some parts of the Apennines. — *Translated from the Original Italian, 4. vols. with 11 plates, London, 1798.*
- SPECIALE S. — All'Etna! Escursione del 6 agosto 1876. Relazione. — *Musumeci-Papale, Catania, 1876.*
- SPECIALE S. — 1881. — *See Ricciardi.*
- SPECIALIS N. — Rerum Syculorum Libri octo (1282-1337. — *Thes. Sic. Vol. V.*
- SQUILLACI P. — Progressi portentosi dell'incendio di Mongibello. — *Catania, 1669, in 8^o, fol. 8.*
- STAMPINATO B. — Osservazione sui tremuoti in occasione del tremuoto che scosse orribilmente la città di Catania la sera del 20 febbrajo 1818. — *Catania, 1818, in 4^o, pp. 64, pl. 1 (C. A.).*
- STOBÆUS. — Flor. 79,38. — *(Cit. by Aelian).*
- STOPPANI A. — Corso di Geologia. — *Vol. I-III. — Bernardoni e Brigola. Milano, 1873. (Etna. Vol. I. § 585, 596, 602, 603, 611, 617, 618, 650, 651, 683; Vol. II, § 599; Vol. III. § 137.*
- STOPPANI A. — Sull'opuscolo "Esperimenti vulcanici del Prof. Gorini di Arturo Issel." Nota. — *Rend. d. R. Ist. Lomb. Ser. II, Vol. VI, Fasc. VIII, Milano, 1873.*
- STRABO. — Geogr. 6, 2; De natura rerum. — *Lib. VI.*
- SUESS F. — Die Erdbeben des südlichen Italien. — *Denkschr. d. K. Akad. d. Wissensch. Wien, 1874. — Abstract: Boll. d. R. Com. geol. d'Italia, Fasc. Aprile 1875. — Boll. d. Vul. ital. Fasc. I, II e III, pag. 42. Roma, 1875.*
- SURITA. — Annales Rerum Aragonensium. — *I, III, c. 86.*

- SVETONIUS C. — Caligula c, 51. — (*Eruption 38-40 A. D.*)
- SWINBURNE. — Travels in the Two Sicilies. — Vol. IV. (*Ascension and description of Etna*). — London, 1795. — German by I. R. Forster, II. Th. Hamburg, 1785.
- TARCAGNOTTA. — Istoria del Mondo. (Earthquake of 1169). — (*Cit. by Mongitore*).
- TEDESCHI (DI) E. V. — Eruption boueuse à la base de l'Etna. — *La Nature. Fasc. I. Paris, Mai, 1880*
- TEDESCHI V. — A propos des recherches chimiques faites par M. M. Ricciardi et Speciale sur les laves des environs de Catane et sur les basaltes de la Sicile. — *Acad. des Sciences de Paris, 1882, in 4°, pp. 7 (C. A.)*.
- TEDESCHI V. — La récente éruption de l'Etna (22 mars 1883). — *La Nature (1883) I, 305-306*.
- TEDESCHI E PATERNÒ T. — Breve ragguaglio dell'incendio di Mongibello, avvenuto in quest'anno 1669, con tre piante: una di Catania antica in tempo della gentilità, altra della medesima prima degli incendi e la terza dell'istessa già deformata dal fuoco. — *Napoli, 1669, in 4°, pp. 70, pl. 3, portrait*.
- TENORE M. — Ragguagli di alcune peregrinazioni effettuate in diversi luoghi delle provincie di Napoli, e di Terra di Lavoro 1832. — ?, in 8°.
- THUCYDIDES. — III. 116. — *Eruptions 475, 425 (B. C.)*.
- TOLOMEO (DI LUCCA). — Bibl. Part. Tom. XXV. (*Earthquake of 1669*). (*Cit. by Mongitore*).
- TORNABENE PAD. — Lettera sull'attuale eruzione dell'Etna di Nov. 1843, etc. — *Rend. R. Accad. Sc. Fis. Mat. Napoli, 1843-1846, T. II, pp. 441-447*.
- TORNABENE F. — Sulla Eruzione presente dell'Etna 1.^a e 2.^a parte. — *Rend. d. R. Acc. d. Sc. di Napoli, 1852, pp. 113-120, 146-154*.
- TORNABENE F. — Flora fossile Etnea. — *Atti d. Acc. Gioenia. Ser. 2^a, Vol. XVI, Catania, 1859*.
- TORNABENE F. — Come si rendano coltivabili le lave dell'Etna. — *Rend. d. Acc. d. Sc. di Napoli, 1864*.
- TORNABENE F. — Sull'arginazione del Simeto. — *Giorn. di Agricolt. Ind. e Comm. del Regno d'Italia, 30 novembre 1864*.
- TORNABENE F. — Condizioni della Provincia di Catania in rapporto alle acque potabili. — *Giorn. di Agricolt. Ind. e Comm. d. Regno d'Italia, 31 ottobre, 1865*.
- TRAVAGLIA R. — 1879. — See Baldacci.
- TRITHEMIUS. — Chronologia monasteriorum. — (*Cit. by Massa, Etna, and by Mongitore*).

- UGHELLI. — Cronica pisana. (Earthquake of 1169.) — *Cit. by Mongitore*).
- VAGLIASINDI P. DI RANDAZZO. — Memoria sull'eruzione accaduta nella pioggia accidentale dell'Etna al primo novembre 1832. — *Palermo, 1833*.
- VALERIUS FLACCUS. — Argon. — *lib. II, 24, 33*.
- VALGUARNERA. — Origine di Palermo. — (*Cit. by Massa, Etna*).
- VARENIUS B. — Geographia generalis, in qua affectiones generales telluris explicatur. (Lib. I, cap. X, sur l'île de Vulcano et sur l'Etna). Elzev. — *Amstelodami, 1664*.
- VECCHI (DE) E. — Notizia su di alcune altitudine determinati geodeticamente nella regione dell'Etna. — *G. G. Casson, Torino, 1866*.
- VENTIMIGLIA D. C. — Pianta del monte Etna. — (*Cit. by Massa, Etna*).
- VETRANI A. — Sebethi vindiciae, sive dissertatio de Sebethi antiquitate, nomine, fama, culto, origine, prisca magnetudine, decremento, atque alveis, adversus Jacobus Martorellium. — *Neapoli, 1767, in 8°, pp. 8 + 213, pl. II*.
- VIGO L. — La eruzione etnea del 1852. Testimonianza. — *Atti dell'An. d. Sc. e Lett. di Palermo, N. S., t. II, 1853, in 4°, pp. 28 (C. A.)*.
- VIGO L. — Poesie e prose. — *Palermo, 1823, in 4°, pp. V. + 171+3*.
- VIOTTI G. — Cenni sulla eruzione del Gennaro 1865. — *Gemmelaro Carlo, Ragguaglio etc. pag. 13*.
- VIRGILIUS MARO P. — Aeneis. — *III, 571*.
- VIRGILIUS MARO P. — Georgica. — *I, 471*.
- WALKIDI. — (*Cit. by Amari*).
- WAGLER P. R. — De Aetna poemata questiones criticae. — *Berolini, 1884, in 8°, pp. 107 (C. A.)*.
- WHITE J. — Eruption of Mount Etna. — *Nature, Vol. XXXIV, pp. 82, 108*.
- WENTHERN POLYCARPUS. — Brieg der Elementen, wider das baimmerus-würdige Sicilia ader Beschereibung des erschruklichen Bebeus und Erschüt,tern der Erder gransamen Ubelauffs und Sturn des meers auch höchstensselichen Toben und siedenden Wültur des Jener-auspeinden Bergs Aetna. — *?, 1693, in 4°, pp. 52 (C. A.)*.
- WINCHELSEA (EARL OF.) — A true and exact relation of the late prodigious earthquake and eruption of mount Etna or Mongibello, as it came in a letter written to his Majesty from Naples. Together with a more particular narrative of the

same , as it is collected out of several relations sent from Catania. — *Published by Authority. Printed by Newcomb in the Savoy, 1669, in 4°, pp. 30, with a sketch of the eruption.*

ZURCHER ET MARGALLE. — *Volcans et tremblements de terre (Etna et Stromboli). — Paris, 1866.*





ESUVIUS

- ABATI A. — Il Forno, Poesia heroica burlesca e latina sopra il Monte Vesuvio etc. -- *Napoli, 1631, in 8°, (B. N.).*
- ABBATI B. — Epitome meteorologica di tremuoti con la cronologia di tutti quelli che sono accorsi in Roma dalla creatione del mondo sino agli ultimi successi sotto il pontificato del regnante pontefice Clemente XI il dì 14 Gennaro giorno di Domenica su le due della notte meno un quarto, e 2 di Febbraio del corrente anno 1703. — ? (C. A.).
- ABICH H. — Sur la formation de l'Hydrochlorate d'Ammoniaque à la suite des éruptions volcaniques et en particulier de celle du Vésuve en 1834. — *Bull. d. l. Soc. géolog. d. France, 1.^{re} Sér. Tom. III. Paris, 1835.*
- ABICH H. — Sur les phénomènes volcaniques du Vésuve et de l'Etna. — *Bull. d. l. Soc. géol. de France, 1.^{re} Sér. Tom. III. Paris, 1835.*
- ABICH H. — Vues illustratives de quelques phénomènes géologiques, prises sur le Vésuve et l'Etna pendant les années 1833-34. — *Paris, 1836 pp. 8, pl. 10.*
- ABICH H. — Erläuternde Abbildungen der geologischen Erscheinungen am Vesuv und Aetna in den Jahre. 1833 u. 1834. — *Berlin, 1837.*

- ABICH H. — Ueber Lichterscheinungen auf dem Kraterplateau des Vesuv im Juli 1857. — *Zeits. d. Deutsch. geol. Gesell. Berlin*, 1857.
- ABICH H. — Ueber die Erscheinung brennenden Gases im Krater des Vesuv im Juli 1857, und die periodischen Veränderungen; welche derselbe erleidet (1857). — *Bull. d. l. Class. Phys. Math. d. l. Acad. Imp. d. Sc. d. S.^t Petersburg*, Vol. XVI, 1858.
- ACCADEMIA DI NAPOLI. — Istoria dell'incendio del Vesuvio accaduto nel maggio 1738, 2.^a ediz. — *Napoli*, 1740.
- ACCADEMIA PONTANIANA. — Relazione intorno all'incendio del Vesuvio cominciato il dì 9 dicembre 1861. — *Napoli*, 1862, pp. 36, 3 plates. (C. A.).
- ACCADEMICO IMANTO. — Incendio del Vesuvio, pubblicato per cura di Vincenzo Bone. — *Napoli*, 1632, in small 8°, fol. X. (C. A.).
- ACERBI F. — De Vusuviano incendio anno 1631. In « Polypodium Apollineum » — *Napoli*, 1674, in 8.°
- ADAMI P. — Napoli liberata dalle stragi del Vesuvio. — *Napoli*, 1633, in 8.°, (O. V.).
- ADAMO F. M. D' — L'avampante ed avampato Vesuvio, in ottava rima. — *Napoli*, 1632, in 12°, fol. XII. (C. A.).
- AFELTRO O. DE — De Monte Vesuvio ac ejus eruptione. — *M. S. in the Biblioteca Brancacciana*. Copy in (C. A.).
- AGNELLO DI SANTA MARIA. — Trattato scientifico delle cause che concorsero al fuoco e terremoto del Monte Vesuvio. — *Napoli*, 1632, in 8.°, pp. 100. (C. A.).
- AGRESTI A. — Pochi versi sulla Torre del Greco nel 1861. — *Napoli*, 1862, in 8.°, pp. 12. (C. A.).
- AGRESTI G. D. — il Monte Vesuvio (Song) In Vol. delle Rime d'illustri ingegni napoletani. — *Venezia*, 1633, in 12.°, pp. 37-48. (C. A.).
- ALBINUS F. — Dialogus de Vesuvij incendio. — *V. Falcone*. (C. A.).
- ALEXANDER C. — Practical remarks on the lavas of Vesuvius, Etna, and the Lipari Islands. — *Proceed. Scient. Soc. of London*. Vol. I. London, 1839.
- ALOIA. — Eruzione del Vesuvio nella notte degli 8 agosto 1779. — *One plate*. (C. A.).
- ALVINO F. — Il Vesuvio. Cenno brevissimo sugli antichi suoi nomi, sue dimensioni, istorie di tutte l'eruzioni, ragioni fisiche di tal fenomeno, ed uno sguardo sul cratere (eruzione del 1794). — *Napoli*, 1841, in 8.°. pp. 18, with a coloured figure. (C. A.).
- ALZARIO DELLA CROCE V. — Vesuvius ardens idest motum et incendium. — *Vesuvii Montes in Campania XVI. Mensis De-*

- cemb. Anno 1631. — *Romae*, 1632, in 4.º, fol. IV, pp. 318, fol. 1.
- AMATO P. G. (D') — Giudizio filosofico intorno ai fenomeni del Vesuvio. — *Napoli*, 1755, in 4.º, pp. 38.
- AMATO P. G. (D') — Divisamento critico sulle correnti opinioni intorno ai fenomeni del Vesuvio e degli altri vulcani. — *Napoli*, 1756, in 8.º, pp. 90, pl. 1.
- AMITRANO A. — Encomium sacri sanguinis gloriosi martyris et pontificis Januarii. — *Neapoli*, 1632, in 8º, fol. IV, (O. V.).
- AMODIO G. — Breve trattato del terremoto, scritto in occasione dell'incendio successo nel monte Vesuvio nel giorno 16 dicembre 1631 etc., — *Napoli*, 1632, in 8.º, pp. 60, fig. 1.
- ANCORA G. (D') — Prospetto storico fisico degli scavi d'Ercolano e di Pompei e dell'antico e presente stato del Vesuvio. *Napoli*, 1803, in 8.º, pp. 137, pl. II.
- ANDERSON. — Volcanic vapours of Mount Vesuvius. — *Proceed. of the Phil. Soc. of Glasgow*, Vol. III, N. 2, 1872-73.
- ANDERSON T. — The Volcanoes of the two Sicilies. — *Geol. Mag.*, Dec. III, Vol. V. p. 473.
- ANDOSILLA LARRAMEN DE JUAN. — A Vesuvio. A sonnet. — *See Quinones*. (A. C.).
- ANDRINI. — La grande éruption du Vésuve, Naples 17 Décemb.— *Press. Scient. des Deux Mondes*, N. 2, 1862, T. 1.^r, Paris, in 8.º, pp. 114-119. (C. A.).
- A. N. M. — Un Papiro, ossia i gladiatori nella caverna del Vesuvio. — *Venezia*, 1826, in 4.º, pp. 197. (C. A.).
- ANNA A. (D') — Eruzione Vesuviane dal 1779 al 1794 — *Napoli Pl. 1 in fol.* (O. V.).
- ANONYMOUS. — Descripcion del Monte Vesuvio, y relacion del incendio, y terremotos que empezaron a 16 di diziembre 1631—?, in small fol. pp. 7. (C. A.).
- ANONYMOUS. — Nackte Beschrijvinge van de... Aerdbevinge ende Brandt van den bergh Soma... twee miglen van Napels... 15-17 December 1631.—*Leyden*, 1632, in 4.º, pp. 8. (C. A.).
- ANONYMOUS.—Relacion del incendio de la montaña de Soma—(?) 1631, in small fol. pp. 8.
- ANONYMOUS. — Vedute della Eruzione del Vesuvio del 1631. — *Amsterdam*, Fol. 1. (C. A.).
- ANONYMOUS. — Vero ritratto dell'incendio nella Montagna di Somma, altrimenti detto Mons Vesuvi, distante da Napoli 6 miglia, successo alli 16 dicembre 1631. — *Loose sheet? with explanation*, 1631. (C. A.)

- ANONYMOUS. — Avvisi e notizie sull'Eruzione del Vesuvio del 1631, provenienti da Roma e da Napoli dal dì 27 dicembre 1631 al dì 21 febbrajo 1632. — *In the Cancellaria Ducale Estense.*
- ANONYMOUS. — Copia eines Schreibens aufz Neapolis darinnen berichtet werden etliche Erschreckliche Wunderzeitungen welche sich imend desz nechstabgelauffennen 1631.—*Neapolis? 1632, in 4°. fol. 4. (C. A.).*
- ANONYMOUS, — Devotione per il terremoto. — *Napoli, 1632, in 8.° (loose sheet).*
- ANONYMOUS.—Discours von dem brennenden Berg Vesuvio, oder Monte di Somma etc. — *Loc.? 1632, fol. VII. (C. A.)*
- ANONYMOUS.—Novissima relatione dell'incendio successo nel Monte di Somma a dì 16 Dicembre 1631, con un avviso di quello successo nell'istesso dì nella Città di Cattaro nelli parti d'Albania.—*Venetia. Reprinted in Napoli, 1632, in 8.°, p. 16. (C.A.).*
- ANONYMOUS. — Vesuvianii incendii elogium. — *Napoli, 1632, in fol. 2. (C. A.)*
- ANONYMOUS.—Extrait d'une lettre écrite de Naples à l'auteur du journal (des Sçavans) touchant l'embrasement du Mont Vésuve, arrivé au commencement du mois de Janvier dernier 1682. — “ *Journal des Sçavans* ”, 1683, in 12.°, pp. 61-62. (C. A.).
- ANONYMOUS. — Relazione dell'incendio del Vesuvio seguito l'anno 1682 delli 14 di Agosto fino alli 26 del medesimo. — *Roma, 1682, in 4°, fol. 2, figured. (C. A.).*
- ANONYMOUS. — Feureyferige zorn die Ruthe Gottes auff dem Brennenden Berg Vesuvio in Campania über Italien und alle Jündtliche Königreiche weit und breit aussgèstreckt: nach ihren Eigenschafften etc. etc. — (? loc.) 1633, in 4° (fol. 28).
- ANONYMOUS. — Distinta relatione dei portentosi effetti cagionati dalla maravigliosa eruzione fatta dal Monte Vesuvio detto di Somma, di pietre infuocate, e di fiumi di acceso bitume con mistione di minerali di tutte le sorti — *Napoli, 1694, in 4.° fol. 4 (C. A.).*
- ANONYMOUS. — Succinta relazione dell'incendio del Vesuvio accaduto alla fine di luglio e progresso di agosto 1696. — *Napoli, 1696.*
- ANONYMOUS. — Distinta relazione del grande incendio e meravigliosa Eruzione fatta dal Monte Vesuvio detto volgarmente la montagna di Somma, nella quale si dà distintissimo ragguaglio di quanto ha eruttato dalli 29 di aprile per infino alli 10 del corrente giugno 1698 et il danno, spavento, e fuga, che ha apportato a' popoli. — *Napoli and Roma, 1698, in 4,° fol, 2. (C. A.).*

- ANONYMOUS. — Diario della portentosa eruzione del Vesuvio nei mesi di luglio e agosto 1707. — (?).
- ANONYMOUS. — Relazione dei meravigliosi effetti cagionati dalla portentosa eruzione del monte Vesuvio detto di Somma, di pietre infocate, gorgi di fuoco, tuoni saetti e pioggia infinita di arenosa cenere seguita dal dì 26 del caduto luglio per tutti li due del corrente agosto 1707.—*Napoli, 1707, in 4.º fol. 2.* (C. A.).
- ANONYMOUS. — Touchant le mont Vésuve et tremblement à Naples le 5 juin 1688. Lettre écrite le 12. — *Tiré d'un voyage en Italie en 1688, 4^{me} Edit. t. III, La Haye, 1717, in 4.º, pp. 391-418.* (C. A.).
- ANONYMOUS. — Dissertatione della grande Eruttione fatta dal Vesuvio nel maggio del 1737. — *M. S. S. in Library of St. Martino Museum. Napoli, in 4º, pp. 62.* (C. A.).
- ANONYMOUS.—Neapolitanae scientiarum Academiae de Vesuvii conflagratione commentarius. — *Neapolis, 1738.*
- ANONYMOUS. — An account of the eruption of mount Vesuvius 18 May, 1737.—*Philos. Trans. of the R. Soc. of London, 1739, N.º 4555, p. 352, fol. 3.*
- ANONYMOUS. — Historia dell'incendio del Vesuvio accaduto nel mese di maggio dell'anno 1737. — *Napoli, 1740.*
- ANONYMOUS. — Histoire du Mont Vésuve, avec l'explication des phénomènes qui ont coûtume d'accompagner ses embrasements. — *Paris, 1741*
- ANONYMOUS. — De Monte Vesuvio, disquisitionis.—*Acta Helvetica, t. I, 1751, pp. 97-104.*
- ANONYMOUS. — An account of the eruption of Mount Vesuvius in Octob. 1751. *Philos. Trans. of the R. Soc. of London, 1751-52 Vol. XL, pp. 409-412.*
- ANONYMOUS. — Laves qui sortaient des flancs du Vésuve à la suite de l'Eruption de 1754. — *A. plate.* (C. A.).
- ANONYMOUS.—Veduta interiore del Vesuvio nel 1755. — *A Plate?* (C. A.).
- ANONYMOUS. — Sur l'éruption du Vésuve en août 1756. — *Journ. Etrang. mars, 1757.*
- ANONYMOUS. — Vue générale du Vésuve en 1757. — *A plate in fol.?* (C. A.).
- ANONYMOUS. — Ragionamento storico intorno a nuovi vulcani.—*Napoli, 1761.*
- ANONYMOUS. — Eruzione del Monte Vesuvio nell' anno 1767 veduta da Portici. — *A. plate.* (C. A.).

- ANONYMOUS. — An account of the eruption of Mount Vesuvius in 1767. — *Trans. of the American Philos. Soc. Philadelphia, Vol. I. 1771.*
- ANONYMOUS. — Geschichte des Vesuv. In Vol. I, pag. 92-114 of «*Vermischte Beiträge zur physikalischen Erdbeschreibung,*» 6 vols. *Brandenbourg, 1774-1787.*
- ANONYMOUS. — Dei Vulcani o monti ignovomi piu noti, e distintamente del Vesuvio. — *Osservazioni fisiche e notizie istoriche di uomini insigni di vari tempi. Livorno, 1779, in 8.° Vol. 1, pp. LXX + 149, Vol. II, pp. VIII + 228. (C. A.).*
- ANONYMOUS. — Piano del Volcano di Napoli denominato il Vesuvio; colle viepiù rimarchevoli eruzioni seguite in più tempi. Dedicated to the Princess Jablonouka born Princess Sapieha, Palatina di Braclau. *Filip Morg scp. — Published about 1779. Loc. unknown. Explanation in Italian, My own collection.*
- ANONYMOUS. — Ragguaglio di una nuova eruzione fatta dal monte Vesuvio nei primi giorni del corrente agosto 1779. — *Roma, 1779, in 4.° fol. 2. (C. A.).*
- ANONYMOUS. — Relazione o sia descrizione della spaventevole eruzione del monte Vesuvio distante alcune miglia da Napoli verso Levante, seguita la sera delli 8 del corrente mese d'agosto (1779) avendo la stessa cagionati grandissimi danni a tutti que' luoghi, a cui si è estesa. — *Bologna, 1779, in 4.° fol. 2.*
- ANONYMOUS. — Raccolta di lettere scientifiche ed erudite dirette dall'abate Genovesi a diversi suoi amici. (Letter VII. An account of the Vesuvian eruption of 1779 and in the letter VIII of Padre Ant. de Sanctis, that of 1631. — *Napoli, 1780, in 8.° fol. 3, pp. 247. (C. A.).*
- ANONYMOUS. — Carteggio di due amanti alle faldi del Vesuvio. — *Pompei, 1783, in 8.°, pp. 45. (C. A.).*
- ANONYMOUS. — Untergang der Stadt Messina. Ingleichen eine kurze Beschreibung von den beiden Feuerspeyenden Bergen Vesuv und Aetna — ?. 1783.
- ANONYMOUS. — Dettaglio su l'antico stato ed eruzioni del Vesuvio ed eruzione nel 1794. — ?
- ANONYMOUS. — Dialoghi sul Vesuvio in occasione dell'eruzione del 15 giugno 1794. — *Napoli, 1794.*
- ANONYMOUS. — Lettera ragionata ad un amico, nella quale si dà un esatto ragguaglio dell'eruzione del Vesuvio, accaduto ai 15 giugno 1794. — *Napoli, 1794, in 8.° pp. 24. (C. A.).*
- ANONYMOUS. — Relazione ragionata della eruzione del Vesuvio di Napoli, accaduta ai 15 giugno 1794, con la storia di tutte le eruzioni memorabili fino al presente avvenute. — *Without loc. or date, in 8.° pp. 52, pl. 1. (C. A.).*

- ANONYMOUS. — Riscontro di un avvocato napoletano ad un suo amico di provincia della eruttazione del Vesuvio dei 15 giugno 1794. — ? *In* 8,^o pp. 40. (C. A.).
- ANONYMOUS. — Seconda lettera di un legista napoletano ad un suo fratello in provincia, in cui gli da distinto ragguaglio di quanto e avvenuto in Napoli in occasione dell'orribile eruzione del Vesuvio avvenuta ai 15 giugno 1794. — *Napoli?* *in* 8,^o pp. 16. (C. A.).
- ANONYMOUS. — Account of a descent into the crater of Mount Vesuvius by eight Frenchmen on the night between the 18th and 19th of July 1801. — *The Philos. Magaz. Vol. XI, London, 1801.*
- ANONYMOUS. — Account of the late eruption of Mount Vesuvius may 31.st — *Moniteur, June 22nd 1806. Nicholson's Journ. of Nat. Phil. N° 58 Aug. 1806, pp. 345-350.*
- ANONYMOUS. — Le Vésuve. — *Journ. d. l'Empire 7 et 10 nov. Paris, 1807.*
- ANONYMOUS. — Cenno storico dell'eruzione del Vesuvio in ottobre 1822. — *Napoli, 1822, in* 8.^o, pp. 29. (C. A.).
- ANONYMOUS. — Vue de l'église de Resina et de l'éruption du Vésuve du 23 oct. 1822. — *A plate?* (C. A.).
- ANONYMOUS. — Deux lettres sur l'éruption du Vésuve, 22 oct. 1822. — *Bibl. Univ. Vol. XXI, nov. 1822, pp. 190-191, 226-228, and Vol. XXII, feb. 1823, pp. 138-139.* (C. A.).
- ANONYMOUS. — Remarques sur le Vésuve. — *Bull. Sc. Nat. et de Géol. Paris, in* 8,^o p. 39. Also *Edinb. Journ. of Sc. July, 1827, p. 11.* (C. A.).
- ANONYMOUS. — Notice sur Herculaneum, Pompei et Stabiae. — *Edinb. Journ. of Sc. N° XIX. Bibl. Univ. Vol. XL, pp. 411-426, 1829.* (C. A.).
- ANONYMOUS. — Eruzione del Vesuvio. — *Giorn. d. Farmacia, Vol. XVIII, Milano, 1833.*
- ANONYMOUS. — Raccolta di osservazioni chimiche sull'uso dell'acqua termo-minerale vesuviana Nunziante. — *Fascicolo Primo, Napoli, 1833, in* 8,^o pp. 76. (C. A.).
- ANONYMOUS. — Sur l'éruption du Vésuve en juillet et août 1832 (Translation.). — *Biblioth. Univ. d. Sc. etc., Vol. LII. Genève, 1833, pp. 376-388.* (C. A.).
- ANONYMOUS. — Eruption of Vésuvius, January, 3rd 1839. — *A. plate.* (C. A.).
- ANONYMOUS. — Notes on Vésuvius. — *Am. Journ. Sc., Newhaven, 2nd ser. Vol. XIII, N° 37, 1852, pp. 131-133.* (C. A.).

- ANONYMOUS. — Eruption du Vésuve le 1^{er} mai 1855. — *Cuttings from newspapers.* (C. A.).
- ANONYMOUS. — Neuer Ausbruch des Vesuvs. — *Mulhausen, 1855.*
- ANONYMOUS. — Phénomènes observés au Vésuve. — *La Science pour tous, 1^{re} An., N° 15, août 1856, pp. 119-120.* (C. A.).
- ANONYMOUS. — Eruzione del Vesuvio del maggio 1858. — *21 numbers of "Giornale del Regno delle due Sicilie, 1858.* (C. A.).
- ANONYMOUS. — Carta della regione perturbata dai fenomeni vesuviani, cominciati il dì 8 dicembre 1861. — *Napoli, 1862.*
- ANONYMOUS. — Conto reso dalla Commissione centrale pei danneggiati di Torre del Greco dal dì 16 Dicembre 1861 al 27 aprile 1862. — *Napoli, 1862, in 8.°, pp. 28.* (C. A.).
- ANONYMOUS. — Intorno all'incendio del Vesuvio cominciato il dì 8 dicembre 1861; relazione per cura dell'Accademia Pontaniana, — *Napoli, 1862.*
- ANONYMOUS. — Il Vesuvio — Strenna pel 1869, pubblicata a pro dei danneggiati dell'eruzione del 1868. — *Napoli, 1869, in 8.°* (C. A.).
- ANONYMOUS. — Eruption du Vésuve des 25, 26 et 27 avril 1872. — *Figures in La Presse Illustrée, 4 mai, 1872. Paris.* (C.A.).
- ANONYMOUS. — Eruzione del Vesuvio dell'anno 1872. — *M. S. documents in the archives of the municipality of Torre del Greco. Fol. 17 Copy.* (C. A.)
- ANONYMOUS. — Relazione della Giunta comunale di Napoli al Consiglio su' provvedimenti adottati per la eruzione del Vesuvio del 1872 ed atti relativi. — *Napoli, 1872, in 4.° pp. 31.* (C. A.)
- ANONYMOUS. — Statuto e regolamento organico dell'Associazione Vesuviane di mutuo soccorso per assicurare le proprietà dai danni delle lave vulcaniche. — *Napoli, 1873, in 4.°, pp. 42.* (C. A.).
- ANONYMOUS. — Il Vesuvio. — Un Sonetto ed un Ode. — ? fol. 2. (C.A.).
- ANONYMOUS. — Sommet du Vésuve; autre vue du même sommet durant une petite éruption. — *Plate in fol. ?...* (C. A.).
- ANONYMOUS. — Partenopè terraemotu vexata. — *M. S. Copy?* (C. A.).
- ANONYMOUS. — Veduta del Monte Vesuvio e parte della città di Napoli. — *Napoli?.* (C. A.).
- ANONYMOUS. — Veduta di parte delle lave di bitume che nelle eruzione vomitate dal Vesuvio coprirono l'antichissima Città di Ercolano; prima della nostra era posta al di sotto di questi luoghi, tra il presente Portici e la Torre del Greco. — *Napoli?* (C. A.).
- ANONYMOUS. — Vesuvius. — *Encycl. Britannica, Vol. XVIII, pt. II, in 4.°, pp. 728-734.*

- ANONYMOUS. — Vesuvius morum magister. — *M. S.*, fol. 3. (C. A.).
- ANTICI S. — Sonetto (1631). — *V. G. Urbano.* (C. A.).
- APOLLONI. G. — Il Vesuvio ardente. — *Napoli*, 1632, in 12° fol. 15, 2.^d Edit.
- ARAGO F. — Liste des Volcans actuellement enflammés. — *Annu. d. Bur. d. Longit. année 1824*, pp. 167-189. (C. A.).
- ARCONATI, VISCONTI G. M. — Appunti sull' eruzione del Vesuvio del 1867-68. — *Giornale Politecnico di Milano*, Vol. V. fasc. III, March, 1868; in 8°, pp. 237-253. (C. A.).
- ARDINGHELLI M. — Eruption du Vésuve en 1767. — *Compt. rend. d. l'Accad. d. Sc. Paris*, 1767.
- ARMFIELD H. T. — At the crater of Vesuvius in eruption. A word picture. — *Salisbury*, 1872.
- ARMINIO I. D'. — De terraemotibus et incendiis eorumque causis, et signis naturalibus et supranaturalibus. Item de flagrationi Vesuvii ejusque mirabilibus eventis et auspiciis. — *Neapolis*, 1632, in 8°, pp. 16.
- ARTHENAY (d') — Journal d'observations dans les différents voyages qui ont été faits pour voir l'éruption du Vésuve. — *Mém. d. Matem. et d. Phys d. l'Acad. d. Sc. Vol. IV*, Paris, 1773, pp. 247-280.
- ASCIONE C. — Breve compendio della descrizione della Torre del Greco antica e moderna, delle sue chiese esistenti prima e dopo 1631. — *Napoli*, 1836, in 4°, pp. 120. (C. A.).
- ASTERIO P. — Discorso aristotelico intorno al terremoto, etc. — *Napoli*, 1632, in 4° (in *Biblioteca Vit. Eman. Roma*).
- ASTORE F. A. — Eruzione del Vesuvio del 1794. — *Napoli*, 1794.
- ATLANTE. Di vedute de principali incendi del Monte Vesuvio etc. *V. Duca della Torre.* (C. A.).
- ATTUMONELLI M. — Della eruzione del Vesuvio accaduta nel mese d'agosto dell'anno 1779. Ragionamento istorico-fisico. — *Napoli*, 1779. In 8°, fol. IV, pp. 147, pl. I. (C. A.).
- AUBRYET H. — Pompei et les pompeïens, par Marc Monnier. — *Compt. Rend., Acad. Sc., Paris*, 1864, in 8°, fol. V. (C. A.).
- AUDOT. — Quattro vedute del Vesuvio riguardanti le eruzioni del 1751, 1804, 1822. In 8°. — *Napoli* (?)
- AUGEROT A. (d') — Le Vésuve; description du volcan et ses environs. — *Limoges*, 1877.
- AULDJO J. — Vue du Vésuve, avec un précis de ses éruptions principales depuis le commencement de l'Ere Chrétienne jusqu'à nos jours. — *Spettatore del Vesuvio. Fasc. I, Napoli*, 1832, in 8°, pp. 102, pl. XVII, map. 1.
- AULDJO J. — Veduta del Capo Uncino presso Torre dell' Annun-

- ziata, della così detta sorgente del Vesuvio, e degli avanzi di un cipresso giacente nel tufo a quaranta palmi di profondità. — *Spettat. d. Vesuvio. Fasc. II, Napoli, 1832.*
- AULDJO J. — Sketches of Vesuvius with a short account of its principal eruptions. — *Naples, 1832, fol. III, pp. 96, map. 1, pl. XVII, London, 1833.*
- AULDJO J. — Source jaillissante d'eau minérale, découverte, en 1831, près du Cap Uncino, dans le Royaume de Naples. — *Biblioth. Univ. d. Sc. Bell. Lettr. et Arts, faisant suite à la Biblioth. Britann. red. à Genève. Partie d. Sc. 1^{re} Sér. Vol. LII, Genève, 1833. The American Journ. of Sc., and Arts; by B. Silliman etc. First Ser. Vol. XXV. New Haven, 1834.*
- AULISIO G. D. (D') — Divotissime Orationi ecc. — *Mentioned in the catalog. of Vinc. Bove. V. Mormile.*
- AUTORI VARI. — Dei vulcani o monti ignivomi più noti, e distintamente del Vesuvio. — *Livorno, 1779.*
- AYALA S. (d') — Copiosissima y verdadera relacion del incendio del Monte Vesuvio, donde se da cuenta de veinte incendios que ha habido sin este último. — *Napoles, 1632, in 4°, pp. 28.*
- AYELLO F. A. (DE) — De ingenti ac repentino in hoc tempore Vesuvii Montis lamentabile incendio. Epistola. — *Neapolis, 1632, fol. 4.*
- AYROLA F. L. — L'Arco celeste, ovvero il trionfo di Maria dell'arco e suoi miracoli. — *Napoli, 1688, in 4.° fol. XII, pp. 328, fol. 12. (C. A.)*
- BADILY W. — Estratto di una lettera intorno alla pioggia di cenneri nell'Arcipelago, nell'incendio del Vesuvio 1631. — *Giornale dei Letterati per l'anno 1674, pp. 146-147, Roma, in 4.° (C. A.). (In French) Mem. de Phys de toutes les Acad. d. Sc., Lausanne, 1754.*
- BAILLEUL. — Remarques sur l'éruption de 1850. — *Compt, rend, Hebd, des Séanc. d. l'Acad. d. Sc. Vol. XXXI. Paris, 1850.*
- BALDUCCI F. — Gli incendi del Vesuvio. Discorso accademico. At the end of the rhymes of the same author. — *A vol. in 18° with a portrait. Venetia, 1642, pp. 459-750. (C. A.)*
- BALZANO F. — L'antica Ercolano, ovvero la Torre del Greco tolta all'oblio. — *Napoli, 1688. 3 books in one vol. in 4.° (Eruption of Vesuvius, 1680, pp. 81-85. (C. A.)*
- BANIER ABBÈ. — Des embrasements du mont Vesuve. — *Ac. des Inscript. et Bell. Lett. Vol. IX. pp. 14-22, 1736, in 12.° M. S. copy. (C. A.)*
- BARBA A. — Ragionamento fisico-chimico sull'eruzione ultima del Vesuvio accaduta ai 15 giugno 1794. — *Napoli, 1794.*

- BARBAROTTA L. — Il Vesuvio: a song. (Il Fausto ritorno da Vieuna di Ferdinando IV) — *Napoli*, 1791, pp. 13-19. (C. A.).
- BARBERIUS F. — De prognostico cinerum quos Vesuvius Mons dum conflagrabatur eructavit. — *Neapoli*, 1632, in 4.^o, pp. 64.
- BARBERIUS F. — Manifestum eorum quae omnino verificata fuerunt jam antea ab ipso praedicta in prognostico cinerum quos Mons Vesevus emisit dum comburebatur. — *Neapoli*, 1635, in 4.^o, pp. 14. (O. V.).
- BARONIUS ET MANFREDI F. — Vesuvii montis incendium. — *Neapolis*, 1632, in 4.^o, pp. 8.
- BARRA C. — Partenope languente per l'accaduto terremoto al 5 giugno 1688. — *Napoli*, 1688, in 12.^o (C. A.).
- BARRIER (Abbé) A. — Des embrasements du mont Vésuve. — *Acad. d. Inscr. et Bell. Lettr. Tom. IX. Paris*, 1736.
- BARTALONI D. — Osservazioni sopra il Vesuvio. — *Atti d. Acc. d. Sc. d. Siena. Vol. XXV. Siena*, 1776.
- BARTOLI P. — Continuazione dei successi del prossimo incendio del Vesuvio cogli effetti della cenere etc. — *Napoli*, 1662.
- BARUFFALDI G. — Vesuvio. Baccanale. — *In 12.^o pp. 32, without other indications.* (C. A.).
- BASILE G. B. — Tre sonetti nelle Rime d'illustri ingegni Napoletani. — *Venezia*, 1633, in 12.^o, pp. 133-136. (C. A.).
- BASSI B. — Two songs referring to the vesuvian eruption of June 15th 1794. — *Cont. in a vol. entitled Opuscoli Varj. Napoli*, 1794, in 8.^o pp. 41-42. (C. A.).
- BASSI U. — (under pseudonym Plangeneto). La lacrima di Monte Vesuvio, volgarmente Lacrima Christi. A bacchanalian song. — *Napoli*, 1841, in 16.^o pp. 67. (C. A.).
- BEALE N. — Analisi qualitative della cenere del Vesuvio eruttata nella notte del 27 al 28 aprile p. p. — *Ann. d. Chim. Vol. LIV. Milano*. 1872.
- BEAUMONT J. B. ELIE DE—Remarques sur une note de M. Constant Prévost relative à une communication de M. L. Pilla, tendant à prouver que le cône du Vésuve a été primitivement formé par soulèvement. — *Compt. rend. Hebdom. d. Séanc. d. l'Acad. d. Sc. Vol. IV. Paris*, 1837.
- BELLANI A. — Salita al Vesuvio — *Milano*, 1835.
- BELLICARD. — Observations upon the Antiquities of the town of Herculaneum, discovered at the foot of Mount Vesuvius. — *London*, 1753, in 8.^o, pp. VII, plates 42. Another edition in 1756. (C. A.).
- BELTRANO O. — Vesuvio centone. — *Napoli*, 1633, in 8.^o, fol. 1, pp. 30 (O. V.).

- BENIGNI D. — Sonetti tre (1631). — *V. G. Urbano*. (C. A.).
- BENIGNI D. — La strage di Vesuvio. Lettera all'abate Perretti. — *Napoli, 1632, in 4.º, fol. 6.*
- BERGAZZANO G. B. — Bacco arraggiato co' Vorcano, discorso ntrà de lloro. — *Napoli, 1632, in 8.º small, fol. 8, (C. A.).*
- BERGAZZANO G. B. — Il Vesuvio fulminante. Poema. — *Napoli, 1632, in 8.º (B. N.).*
- BERGAZZANO G. B. — I prieghi di Partenope. Idillio. — *Napoli, 1632, in small 8.º, fol. 8. (C. A.).*
- BERGAZZANO G. B. — Vesuvio Infernal. Scenico avvenimento. — *Napoli, 1632, in 12º (V. Quadrio, Storia e ragione d'ogni poesia) (III, Par. I, p. 88). (C. A.).*
- BERKELEY E. — Eruption du Vésuve en 1717. — *Phil. Transact. of the R. Soc. of London. Vol. VI. 1717.*
- BERNARDINO F. — Discorso istorico intorno all'eruzione del Monte Vesuvio 15 giugno 1794. — *Napoli, 1794, in 4.º pp. 22.*
- BERNARDO F. — L'incendio del Monte Vesuvio etc. — *Napoli, 1632, in 4.º, pp. 32.*
- BETOCCHI A. — Sulla cenere lanciata dal Vesuvio alla fine della passata straordinaria eruzione (24 aprile). — *Atti d. R. Acc. d. Lincei Vol. XXV, 1872.*
- BEULÉ. — Le drame du Vésuve. — *Paris, 1872, in 12º, pp. 336, map 1. (C. A.).*
- BINNET-HENTSH J. L. — Une excursion au Vésuve. — *Echo d'Alpes. N. 2, 1876. (?)*
- BITTINI G. — Sonetto (1631). — *V. G. Urbano. (C. A.).*
- BITTNER A. — Beobachtungen am Vésuv. — *Verh. d. K. K. geol. Reichs Anst. N. 12, Wien, 1874.*
- BLACK J. M. — An account of the eruption of Mount Vesuvius of April 1872. — *Proc. Geol. Assoc. Vol. III, N. 6. 1874.*
- BLAKE J. F. — A Visit to the Volcanoes of Italy. — *Proceed, Geol. Assoc, London, 1889, Vol. IX, pp. 145-176,*
- BLAEV J. A. — Theatrum civitatum nec non admirandorum Neapoli et Siciliae regnorum. — *In fol. pp. 78-30 with 30 plates (C. A.).*
- BLANC LE. — 1863. — *V. Fouqué.*
- BLASIUS G. DE — La seconda congiura di Campanella. — *Giornale Napoletano, Vol. I, Napoli, 1875, in 8º.*
- BOCANGEL Y UNQUETA G. — Epitafio al Vesuvio y sus incendios, Sonnet. — *V. Quinones. (C. A.).*
- BOCCAGE MME DU. — Sur le Vésuve. Deux lettres en date des 8 et 15 oct. 1757. — (*Ext. du Recueil de ses œuvres*), *Lyon 1770, III Vols. in 8º, Vol. III p. 265-286. (C. A.).*

- BOCCOSI FERDINAND (Biondi Francesco). — Delle centurie poetiche. — *Napoli, in 12°, pp. 203, VII, in 2 parts.* (C. A.).
- BOMARE DE M. — Sopra il Vesuvio ed altri vulcani. Dei Vulc. o monti ignivomi. — *V. Anonymous, Livorno, 1775.*
- BORKOWSKY (DUNIN) S. — Sur la sodalite du Vésuve. — *Ann. d. Mines, Vol. I, Paris, 1816.* — *Journ. d. Phys. d. Ch. et d. l'Hist. nat. Vol. LXXXIII, Paris, 1816.* — *Ann. of Philos. or Magaz. of Chem. Miner. Mech. and the Arts. 1 Ser. Vol. X, London, 1817.* *Ann. der Physik von L. W. Gilbert. Bd. LXIII. Halle und Leipzig, 1819.*
- BORNEMANN J. G. — Sur l'état des volcans d'Italie pendant l'été de 1856. — *Translation of De Perrey from Tageblatt. der 32 Versam. Deutsch. Naturf. und Aertze in Wien, 1856, p. 114-141. Original M. S. pp. 4.* (C. A.).
- BORNEMANN J. G. — Ueber Erscheinungen am Vesuv und geognostisches aus den Alpen. — *Zeitschr. d. Deuts. geol. Gesell. Bd. IX. Berlin, 1857.*
- BORZI. — 1814 (?). — *V. Granville.*
- BOTTIS G. (DE) — Ragionamento istorico intorno ai nuovi vulcani comparsi nella fine dell'anno scorso 1760 nel territorio della Torre del Greco. — *Napoli, 1761, in 4°, pp. 67, pl. 2.* (C. A.).
- BOTTIS G. (DE) — Ragionamento storico sull'incendio del Vesuvio nell'ottobre del 1767. — *Napoli, 1768.*
- BOTTIS (DE) G. — Ragionamento istorico dell'incendio del Monte Vesuvio, che cominciò nell'anno 1770 e delle varie eruzioni che ha cagionate. — *Napoli, 1776, in 4.° pp. 84 + III, pl. 4.* (C. A.).
- BOTTIS G. DE — Ragionamento istorico intorno all'eruzione del Vesuvio che cominciò il dì 29 luglio dell'anno 1779 e continuò fino al giorno 15 del seguente mese di agosto. — *Napoli, 1779, in R. 4°, pp. 117 + III, pl. 4.* (C. A.).
- BOTTIS G. (DE) — Istoria di varii incendi del Monte Vésuvio. — *Napoli, 1786.*
- BOTTONI D. L. — Pyrologia Topographica id est de igne dissertatio juxta loca cum eorum descriptionibus. — *Neapolis, 1692. Messanae, 1721.*
- BOURKE E. (de). — Le Mont Somma et le Vésuve. — *Notice sur le ruines les plus remarquables de Naples et ses environs, Paris, 1823, in 8., pp. 167-174.* (C. A.).
- BOURLLOT J. — Etude sur le Vésuve, son histoire jusqu'à nos jours. — *Paris, 1867.*
- BOVE V. — Il Vesuvio accesso. — *Napoli, 1632, in 12.°, fol 12.*

- BOVE V. — Nuove osservazioni fatte sopra gli effetti dell'incendio del Monte Vesuvio aggiunta alla decima Relatione etc. — *Napoli, 1632, in 8.º, pp. 31.*
- BOVE V. — Decima relazione nella quale più dell' altre si dà breve et succinto ragguaglio dell'incendio risvegliato nel monte Vesuvio o di Somma, etc. — *Napoli, 1632, in 4.º, pp. 11.*
- BOVIO G. — La Geologia dell' Italia meridionale rispetto all' indole degli abitatori. — *Napoli, Ernesto Anfossi, 1883, in 8º, pp. 31. (C. A.).*
- BRACCINI (AB.) G. C. — Relazione dell' incendio fattosi nel Vesuvio ai 16 dicembre 1631, e delle sue cause ed effetti etc. — *Napoli, 1632, in 4.º fol. 2, pp. 104.*
- BRACCINI (AB.) G. C. — Relazione dell'incendio del Vesuvio ai 16 dicembre 1631. — *Napoli, 1632, in 8º, pp. 40.* (This rare account was referred to by P. G. M. della Torre under the title « Colonna Girolamo. Cardinale. » Lettera sopra l'incendio del Monte Vesuvio del 1631.
- BRARD. — Une Eruption du Vesuve. — *Feuilleton de l' Echo de Numidie. 15-29 mai and 5 juin 1861. (C. A.).*
- BREISLAK S. — Institutions géologiques. — *Vol. I-III. Milan, 1818.*
- BREISLAK S. E WINSPEARE A. — Memoria sull' eruzione del Vesuvio accaduta la sera del 15 giugno 1794. — *Napoli, 1794, fol. 12. (C. A.)*
- BREISLAK S. UND WINSPEARE A. — Fortgesetzte Berichte vom Ausbruche des Vesuvs am 14 junius 1794. — *Dresden, 1795.*
- BROCCHI G. B. — Sull'eruzione del Vesuvio del 1812. — *Bibl. Ital. ossia Giorn. di Letter. Sc. etc. Vol. VI. Milano, 1817.*
- BROOKE H. J. — On the Comptonite of Vesuvius, the Brewsterite of Scotland, the Stilbite, and the Heulandite. — *The Edinburgh. Philos. Jour. exhib. a view of the Progr. of. Discov. in Nat. Philos. Vol. VI. Edinburgh, 1822.*
- BROMEIS T. — Analyse eines glimmers vom Vesuv. — *Ann. der Phys. und Ch. von I. C. Poggendorff. Bd. LV. Leipzig, 1842.*
- BRUNI A. — Canzone sull' incendio del Vesuvio (1631). — *V. G. Urbano. (C. A.).*
- BRYDONE P. — Lettre sur l'éruption du Vésuve en 1770. — (?)
- BUCH L. (VON) — « Bocche nuove ». — *Fragment aus einer Reihe von Briefen über den Vesuv. Jahrb. der Berg und Hüttenkunde, von Karl E. von Moll. Bd. II, Salzburg, 1801.*
- BUCH L. (VON) — Lettre sur la dernière éruption du Vésuve et sur une expérience galvanique nouvelle. — *Bibl. Britannique, ou Rec. d. extr. d. Ouvr. Anglais périod. et autres: part. d. Sc. et Arts. Vol. XXX, Genève, 1805.*

- BULIFON A. — Lettere memorabili. Lettera a Mabillon del 1689 e fig. — *Napoli*, 2 Vols. 1693, in 12,^o (C. A.).
- BULIFON A. — Ragguaglio dello spaventevole moto del Vesuvio succeduto il mese di dicembre 1689. Lettera al R. P. Mabillon. — *Napoli*, 1693.
- BULIFON A. — Incendio del Vesuvio dell'aprile 1694. *Lettera*. — *Napoli*, 1694. in 12, pp. 88, pl. 1. *Another edition*, 1696.
- BULIFON A. — Compendio istorico degl'incendi del monte Vesuvio fino all'ultima eruzione accaduta nel giugno 1698. — *Napoli*, 1701, in 12^o, pp. 106+III, pl. II.
- BULWER-LYTTON. — The Last Days of Pompeii. — *Numerous editions*.
- BURIOLI P. — Vera relatione del terremoto, e Voragine occorso nel Monte Vesuvio il 16 Dicembre 1631 a ore 12 etc. — *Bologna*, 1632, in 4^o, fol. 4. (C. A.).
- BUSCA D. — Sonetto (1631) — *V. G. Urbano*. (C. A.).
- CACCABO G. B. — Januarius poema sacrum. — *Napoli*, 1635, in 4^o, fol. 4, pp. 46. (O. V.).
- CAGNAZZI LUCA. — Discorsi meterologici degli anni 1792-93-94. — *Extract from Giornale Letterario di Napoli*. In 8^o, pp. 46, 29. (C. A.).
- CAGNAZZI DE S. LUCA — Lettera sull'elettricismo della cenere lanciata dal Vesuvio, diretta al P. Em. Taddei. — *Extracted from « Giornale Enciclopédico »*. — *Napoli*, June 10th, 1806, pp. 8. (C. A.).
- CAMERLENGHI G. B. — Incendio del Vesuvio. Poema. — *Napoli*, 1632. in 4^o, fol. 2, pp. 190, frontisp.
- CAMOLA G. P. — Sonetto (1631). — *V. G. Urbano*. (C. A.).
- CAMPO D. — Histoire des phénomènes du Vésuve. — *Naples*, 1771.
- CAMPONESCHI F. — De Vesevo monte. Epigramma. — *V. G. Urbano*. (C. A.).
- CANEVA S. (Hermit priest). — Lettera dell'Eremita del S. S. Salvatore sito alle falde del Vesuvio per dare ad un amico suo un succinto ragguaglio dell'accaduta Eruzione la sera del 15 Giugno 1794. — *Without authors name or locality*. fol. 2. (C. A.).
- CANGIANO L. — Sur la hauteur du Vésuve. — *Compt. rend. hebdom. d. Séanc. d. l'Acad. d. Sc. Vol. XXII. Paris*, 1846.
- CANTALUPO G. — Reminiscenze Vesuviane di un profugo. — *Napoli*, 1872, in 8^o, pp. 66. (C. A.).
- CAPACCIO G. C. — Incendio del Vesuvio ; in « Forastiero, dialoghi, etc. » — *Napoli*, 1634, in 4^o pp. 86.
- CAPECELATRO F. — Historia di Napoli — *Vol. I-II. Napoli*, 1724.

- CAPECE P. A. — Lettere scritte al P. A. Capece della Comp. di Gesù a Roma. (Erupt. 1631). — *M. S. in library of the Faculty of Medecine of Montpellier. Copy* (C.A). V. Riccio L.
- CAPOCCI E.—Su di un raro fenomeno vulcanico che il Vesuvio ha offerto nel mese scorso. — *Rend. d. Adun. ed. lavori d. R. Acc. d. Sc. Fis. e Mat. Vol. V. Napoli, 1846.*
- CAPOCCI E. — Relazione del fenomeno delle corone di fumo e di cenere presentato dal Vesuvio nell'eruzione del dicembre del 1846, e nei mesi seguenti. — *Rend. d. adun. ed. lavori d. R. Acc. d. Sc. Fis. e Matém. Vol. V. Napoli, 1846.*
- CAPOCCI E.—Sulla eruzione del Vesuvio degli 8 Dicembre 1861.— *pp. 3. At pages 23, 24, 25 of « Raccolta di Scritti varii per cura di Rinaldo C. de Stertich » — Napoli, 1863, in 8° (C. A.).*
- CAPPA R. — Delle proprietà fisiche, chimiche e terapeutiche dell'acqua termo-minerale Vesuviana Nunziante.—*Napoli, 1847, in 8°, pp. 12. (C. A.).*
- CAPRADOSSO A. — Il lagrimevole avvenimento dell'incendio del monte Vesuvio per la città di Napoli e luoghi adiacenti etc.—*Napoli, 1632, in 4°, fol. 4. (also an edit. 1631).*
- CAPUANO G. A. — 1779. — *V. Sanfelice. (C. A.).*
- CARAFÀ G. — De novissima Vesuvii conflagratione. Epistola isagogica. — *Neapolis. 1632, in 8°, fol. 64, pl. 1. (also 2nd edit. 1632, in 4°, pp. 93, fol. 4, pl. 1.*
- CARDASSI S. — Relazione dell'irato Vesuvio, dei suoi fulminanti furori ed avvenimenti compassionevoli.—*Bari, 1632, in 12°, pp. 46.*
- CARDONE A. — Saggio di poetici componimenti (Sull'ultima eruzione del Vesuvio. Poem.)—*Napoli, 1828, in 8°, fol. I, pp. 25 (C. A.).*
- CARDOSO F. — Al Vesuvio, Sonnet. — *V. Quinones. (C. A.).*
- CARNEVALE G. A.—Brevi e distinti ragguagli dell'incendio del Vesuvio del 1631. — *Napoli, 1632. (Quoted by V. Bove, Soria and Bucca).*
- CARPANO G.—Giornale dell'incendio del Vesuvio nell'anno 1660—(?)
- CARREY E. — Le Vésuve. — *Feuilleton du « Moniteur » des 16, 17 et 18 Octobre, 1861. (C. A.).*
- CARUSI G. M. — Tre passeggiate al Vesuvio nei dì 3 e 21 Giugno e 27 Settembre 1858. — *Napoli, in 4°, pp. 44. (C. A.).*
- CASORIA E. — L'acqua della fontana pubblica di Torre del Greco ed il predominio della potassa nelle acque vesuviane.—*Idrologia e Climatologia Medica, Anno VII, N.° 9, Firenze 1885, in 8°, pp. 12. (C. A.).*

- CASORIA E. — Sopra due varietà di calcari magnesiferi del Somma. — *Boll. d. Soc. d. Naturalisti in Napoli. Ser. 1.^a, Vol. I, Anno I, fac. 1.^o, 1887, pp. 2.*
- CASORIA E. — Composizione chimica e mineralizzazione delle acque potabili vesuviane. — *Idrologia e Climatologia Medica. Anno IX, N. 3, Firenze, 1887, pp. 11. (C. A.).*
- CASORIA E. — Composizione chimica di alcuni calcari magnesiferi del Monte Somma. — *Boll. d. Soc. d. Naturalisti in Napoli Ser. 1.^a, Vol. II, Anno 2, fasc. 2. 1888 in 8.^o, pp. 7.*
- CASORIA. E. — Mutamenti chimici nelle lave vesuviane per effetto degli agenti esterni e delle vegetazioni. — *Boll. d. Soc. Naturalisti in Napoli. Ser. 1.^a, Vol. II. an. 2.^o, 1888, fasc. 2, pp. 18.*
- CASORIA E. — Sulla presenza del calcare nei terreni vesuviani. — (*Boll. Soc. Naturalisti, Vol. II, fasc. 2^o. Napoli, 1888.*)
- CASSANO (Aragona Prince of). — An account of the eruption of Vesuvius in March 1737. — *Phil. Trans. of the R. Soc. of London, 1739.*
- CASSOLA. — 1832 — *V. Pilla.*
- CASTELLI P. — Incendio del monte Vesuvio etc. — *Roma, 1632. in 4.^o, fol. IV., pp. 92. fol. 4.*
- CASTRUCCI G. — Breve cenno della eruzione vesuviana del maggio 1855. — *Napoli, 1855, in 4.^o, pl. 1. (O. V.).*
- CATANI A. — Lettera critica filosofica su della vesuviana eruttazione accaduta il 19 ottobre 1767. — *Calania, 1768, in 4.^o, fol. 3, pp. 42.*
- CATANTI. — Lettera all' Abbate Mecatti sul Vesuvio. — (?)
- CAVALLERI G. M. — Considerazioni sul vapore e conseguente calore che manda attualmente (8 ottobre 1856) il vulcano di Napoli. — *Atti d. Acc. d. Fis. e Mat. di Napoli Vol. XII. 1856-57.*
- CAVALLI A. — Il Vesuvio, poemetto storico-fisico con annotazioni. — *Milano, 1749, in 8.^o, pp. 157, pl. 2. (C. A.).*
- CAVA P. (LA) — Sulla efflorescenza della soda clorurata che trovasi in taluni fumaiuoli attivi del Vesuvio. — *Napoli, 1820.*
- CAVAZZA G. — Sonetto che l'incendio del Vesuvio è stato per salute dell'anime nostra. *Napoli, 1632, loose sheet (B. N.).*
- CAVOLINI F. — Cenno storico dell'eruzione del Vesuvio dell'ottobre 1822. — *Napoli, in 8.^o, pp. 29. (O. V.).*
- CAVOLINI F. — Piano del Vulcano di Napoli denominato il Vesuvio colle più rimarchevoli eruzioni seguite in più tempi. — *Pl. in fol. (published about 1854). (O. V.).*

- CERASO F.—? L'opre stupende e meravigliosi eccessi dalla natura prodotti nel monte Vesuvio etc.—*Napoli, 1632, in 8.º, fol. 18.*
- C. F. T.—L'Eruzione del Vesuvio della notte del 15 Giugno 1794 poeticamente descritta.—? *In 4.º, pp. 30. (C. A.).*
- CHATEAUBRIAND.—Le Vésuve. Voyage en Italie, 1804—(?)
- CHAVANNE De La — Histoire du Vésuve. (In: Audot, Voyage de Naples)—(?)
- CHAVANNES DE.—Le Vésuve.—*Tours 1859 and 1867, pp. 127, pl. 1. (C. A.).*
- CHIARINI G. e PALMIERI L. — Il Cratere del Vesuvio nell'8 novembre 1875. — *Napoli, 1876.*
- CHODNEW A. — Untersuchungen eines schwärzlich grunden glimmers vom Vesuv. — *Ann. d. Phys. und. d. Ch. Bd. LXI. Leipzig, 1841.*
- CHRISTIAN F. (Princ. d. Danimarca). — Osservazioni sulla lava del Vesuvio del 26 gennaio 1820 — *Napoli, 1820.*
- CHRISTIAN F. (Fürst v. Dänemark). — Beobachtungen am Vesuv angestellt in Jahre 1820. Taschenb. für die ges. Miner., von Karl Cäsar Leonhard. Bd. XVI. Frankfurt. am Main 1822.—*Atti d. R. Acc. d. Sc. e Lett.; Sez. d. Soc. R. Borbonica. Vol. II, Napoli, 1825.*
- CHRISTIANI P. — De Vesevo Monte, epigramma.—*See G. Urbano.*
- CICADA H. — De Vesevi conflagratione. In the work entitled “*Carmina*”. — *Lycii, 1647, in 8º, pp. 206 (O. V.)*
- CICCONI M. — Il Vesuvio, canti anacreontici — *Napoli, 1779, in 8.º pp. 96. (C. A.).*
- CILLUNZIO N. — Versi per la eruzione del Vesuvio, accaduta a' 12 Agosto 1804. —? *In 8.º fol. VIII. (C. A.).*
- CINITANO G. — Sonetto. (1631). — *V. G. Urbano. (C. A.).*
- CIOFI A. — Dimostrazione scenografica e iconografica di tutti gli effetti prodotti dall'eruzione del Vesuvio de' 15 giugno 1794. *Pl. in fol. with description.*
- CIRILLI. — Vita S. Januarii. — *Venetii, 1776, in 4º, pp. 48.*
- CLARO F.—*Humanae calamitatis considerationes.*—*Neapoli, 1632, in 4º, fol. 14, pp. 87. (O. V.).*
- CLASSENS DE LONGSTE A. — Souvenirs d'une promenade au Mont Vésuve. — *Naples, 1841, in 8.º, pp. 61. (C. A.).*
- COCHIN ET BELLICARD. — Observations sur les antiquités d' *Herculaneum*, avec quelques reflexions, etc.—*2nd edit. Paris, 1757, in 8º, pp. XLI + 84, pl. 40. See also Bellicard.*
- COLLINI M. — Considerations sur les Montagnes Volcaniques, etc. — *Manheim, 1781, in 4º, pp. VIII, + 61, pl. 1.*
- COLOMBO A. — Osservazioni sulla conformazione sottomarina del

- Golfo di Napoli.—*Rivista Marittima, ottobre-dicembre 1887 with col. maps.*
- COLONNA C. — Lettera sopra l'incendio del Vesuvio nel 1631. — *Napoli, 1632. V Braccini.*
- COLUMBRO G. — Rime e prose.—*Napoli, 1817, Vols. II, in 8.º (Vol. 1. p. 21., 72-75 a poem « Il Vesuvio » speaks of the eruption of 1794. Vol. 2. p. 254, p. 202-211 letter to a friend at Resina speaking of Vesuvius. (C. A.).*
- COMES O. — Le lave, il terreno vesuviano e la loro vegetazione.— (*Lo spettatore del Vesuvio e dei Campi Flegrei, Nuova serie, vol. 1.º*) *Napoli, 1887.*
- COMPTE A. C. — Lettera critico-filosofica sull'eruzione del Vesuvio del 1767. — *Catania, 1868.*
- CONNOR B. — De Montis Vesuvii incendio. Dissertationes medphis. Auxonisi, 1695. — *Acta Eruditorum. Lipsiae, 1696..*
- CONNOR O'. — Mirabilis viventium interitus in Charonea Neapolitana crypta. Novissimum Vesuvii montis incendium anni aere salutis 1694. — *Coloniae Agrippinae, 1694, in 12º, pp. 68 (O. V.).*
- CONTE DI CORUNA. — Sonetto (1631). — *V. Quiniones. (C. A.).*
- COOMANS J. — Sur l'éruption du Vésuve en 1858. — « *Moniteur — du 10 Juin 1858, in 8.º, pp. 6. (C. A.).*
- COPPOLA M. — Contribuzione alla storia chimica dello « Stereocaulon Vesuvianum ». Notizie preliminari.—*Rend. d. Accad. Sc. fis. e Mat. di Napoli. Fasc. 10º, Oct. 1879. in 4.º, pp. 4. (C. A.).*
- COPPOLA M. — Produzione artificiale dell'oligisto sulla lava vesuviana. — *Gaz. Chim. It. Vol. IX., 1879, in 8.º pp. 4. (C. A.).*
- CORAFÀ G. — Veduta del Vesuvio dalla parte di mezzogiorno 25 ottobre, 1751. — *Plate in fol. with descript. (O. V.).*
- CORAFÀ G. — Dissertazione istorico-fisica delle cause e degli effetti delle eruttazioni del Monte Vesuvio negli anni 1751-52— *Napoli, 1752, in 4.º fol. II, pp. 86.*
- CORBONE. — Veduta dell'Eruzione del Vesuvio nel 1631 con illustrazione stampata dei danni prodotti — *Without date or loc. (C. A.).*
- CORNELIUS T. — De sensibus.—*Neapoli, 1638, in 8º, fol. 7, pp. 119.*
- CORRADO M. — Descrizione del fenomeno cagionato dal Monte Vesuvio nella sera del dì 15 di Giugno dell'anno 1794 de' fatti occorsi in seguito e della somma religiosità de' cittadini Napolitani. Verses.—*Napoli, 1794, in 8.º pp. 7. (C. A.).*
- COSSA A. — Sulla predazzite periclasifera del Monte Somma. *Atti*

- di R. Acc. d. Lincel. Ser. 2.^a, Tom. III. Roma, 1876, in 4.^o p. 8.*
- COSTA O. — Fauna Vesuviana, ossia descrizione degl'insetti che vivono nei fumajuoli del Cratere del Vesuvio. — *Ann d' Accad. Sc. Vol. IV, per 1826, Napoli, 1839, in 4.^o, pp. 32, pl. II. (C. A.). See also « Giambattista Vico », Vol. I, pp. 39-44. Napoli, 1857.*
- COSTA O. G. — Rapporto sulle escursioni fatte al Vesuvio in agosto-dicembre 1827 — *Atti di R. Acc. di Sc. e Lett. Sez. di Soc. R. Borbonica. Vol. IV per 1826. Napoli, 1839.*
- COVELLI N. — V. Monticelli.
- COVELLI N. — Cenno sullo stato del Vesuvio dalla grande eruzione del 1822 in poi (1824) — ?, *in 8.^o, pp. 9. (O. V.).*
- COVELLI N. — Débit des minéraux du Vésuve. Catalogue pour 1826. — *Naples, 1826, in 8.^o, pp. 16.*
- COVELLI N. — Sur le bisulfure de cuivre qui se forme actuellement dans le Vésuve. (1826). — *Ann. d. Ch. ou Recueil d. Mém. concern. l. Ch. et l. Art. qui en dépend. Vol. XXVII. Paris 1827. — Bull. d. Sc. nat. et d. Geol. par le Bar. de Ferussac. Vol. XI. Paris 1827. — Ann. der Phys. und. d. Ch. v. J. C. Poggendorff. Bd. X. Leipzig, 1827. — Quart. Journ. of. Sc. Lit. and Arts, Vol. II. London, 1827. Atti d. Accad. d. Sc. Napoli, 1826, pp. 7.*
- COVELLI N. — Memoria sulla costituzione geognostica della Campania. — *Atti R. Accad. Sc. fis. nat. Napoli (An. 1827) ' pp. 37.*
- COVELLI N. — Relazione di due escursioni fatte sul Vesuvio e di una nuova specie di solfuro di ferro, che attualmente producesi in quel vulcano. *Atti d. Accad. Sc. Napoli, 1827. Napoli 1839, in 4.^o pp. 15. (C. A.).*
- COVELLI N. — Mineralogia Vesuviana. — “ *Il Pontano* ” *Napoli 1828-29, p. 19 and 145 (C. A.).*
- COVELLI N. — Sulla Beudantina, nuova specie minerale del Vesuvio (1836). — *Atti d. R. Acc. d. Sc. e Lett. Sez. d. Soc. R. Borbonica, Vol. IV, Napoli 1839.*
- COVELLI N. — Sulla natura dei fumaioli e delle termantiti del Vesuvio dove vivono e si moltiplicano varie specie d'insetti (1826). — *Atti d. R. Acc. d. Sc. e Lett. d. Soc. R. Borbonica, Vol. IV, Napoli, 1839.*
- COZZA P. — Erupt. of Vesuvius A. D. 787. — *V. Archivio Storico per le Province Napoletane. Anno XV, fasc. III, Napoli, 1890, pp. 642-646.*

- COZZOLINO V. — Cataloghi di minerali vesuviani. — *Three sheets. 1844-1846.*
- CRISCOLI P. A. — Vesevi montis elogica inscriptio. — *Neapoli, 1632, 1 leaf in fol. fig. Vesuvius (O. V.)*
- CRISCONIO P. — Il Vesevo: (Ode). — *Napoli, 1828, in 12°, pp. 12. (C. A.).*
- CRISTIANO FRED. Prince of Denmark. — Memoria sulla eruzione del Vesuvio del 1820. — *Att. d. Accad. d. Sc. Napoli, 1820 in 4°, pp. 5, (C. A.).*
- CRIVELLA ANTONIO, detto il "Monaciello" improvvisante. — Il fumicante Vesevo, ovvero il Monte di Somma bruggiato. Con diverse Terre, Casali, e luoghi situati nella sua falda. Con esservi anco un minuto ragguaglio di quanto in quello è successo. Composto in ottava rima. — *Napoli, 1632, in 12°, fol. 6. (C. A.).*
- CURTIS L. M. DE. — Saggio sull'elettricità naturale diretto a spiegare i movimenti e gli effetti dei Vulcani. — *Napoli, 1780, in 8°, pp. 88 (O. V.)*
- CYRILLO M. — Eruption du Vésuve en 1730. — *Philos. Trans. of the R. Soc. of London. Vol. XXII. London, 1732, and Vol. XXIII, 1733.*
- DAMIANO P. — Breve narratione de' meravigliosi esempi occorsi nell' Incendio del Monte Vesuvio circa l'anno 1038, cavata dall'opera del B.^o Pietro Damiano. — *Napoli, 1632, in 12°, fol. 4 (C. A.).*
- DAMIANO P. — Il Vesuvio considerato qual bocca dell' Inferno. (Refers to an eruption A. D. 993. — *Opera Parissits, 1663. 4 vols bound together in fol. Opusc, XIX, 6, 9, and 10, pp. 191-192. (C. A.).*
- DAMOUR A. A. — Analyse de la Périclase de la Somma. — *Bull. d. l. Soc. géol. d. France, 2.^e Série, Vol. VI Paris, 1849.*
- DAMOUR A. A. — Relation de la dernière éruption du Vésuve en 1850. — ?
- DANA J. D. — On the condition of Vesuvius in Italy 1834. — *The American Journ. of Sc. and Arts; By B. Silloman. 1^{re} Ser. Vol. XXVII. Newhaven, 1835.*
- DANA J. D. — Abstract of a paper on the Leucite of Monte Somma by A. Scacchi, with observations. — *The American Journ. of Sc. and Arts; by B. Silliman. 2 Ser., Vol III. New-haven, 1847.*
- DANA J. D. — Abstract of a paper on the humite of Monte Somma; by A. Scacchi, with observations. — *Am. Journ. Sc. 2nd Ser. pp. 175-182, Newhaven, 1852. (C. A.).*
- DANZA E. — Breve discorso dell' incendio succeduto a 16 dicem-

- bre 1631 del Vesuvio e luoghi circonvicini e dei terremoti della città di Napoli. — *Trani, 1632, in 8°, (O. V.)*.
- DARBIE F. — Istoria dell' incendio del Vesuvio dell' anno 1737. (In the work "Dei Vulcani e Monti Ignivomi" V. Anonymous). — *Livorno, 1779*.
- DARTHENAY. — Mémoire sur la ville souterraine découverte au pied du mont Vésuve. — *Paris, 1748, in 8°, fol. II, pp. 52. (C. A.)*.
- DAUBENY C. — 1825. — *V. Raffles*.
- DAUBENY C. — Some account of the eruption of Vesuvius which occurred in the month of August 1834. Extracted from the manuscript notes of cav. Monticelli, foreign member of the Geological Society and from other sources; together with a statement of the products of the eruption and of the condition of the volcano subsequently to it. — *Philos. Trans. of the R. Soc. of London, London, 1835, pp. 153-159*.
- DAUBENY C. — Remarks on the recent eruption of Vesuvius in december 1861. — *The Edinburgh Philos. Journ. Vol. XVII. Edinburgh, 1863*.
- DAU L. — Lettere al Barone Durini intorno ad una nuova teoria spiegatrice dei fenomeni dei Vulcani. — ?, 1835, in 8°, pp. 32. (O. V.).
- DELAIRE. — Osservazioni sul Vesuvio negli anni 1745-1752. In the work of Mecatti. "Discorso storico filosofico del Vesuvio". — *Napoli 1752*.
- DELVAUX. — Vue du Vésuve et d'une partie du Golfe de Naples? (C. A.).
- DEMARD E. — Extinction des Volcans. Etude sur les volcans en général et principalement sur les monts Vésuve et Etna. — *Rouen, 1873*.
- DEQUEVAUVILLER. — Vue du Vésuve prise sur le bord de la mer et de côté de Portici — ?. (C. A.).
- DE QUINONES J. — El Monte Vesuvio aora la Montaña de Soma. — *Madrid, 1632 in 4°, fol. 76. (V. Quinones). (C. A.)*.
- DESERGES M. — Sur l'éruption du Vésuve en janvier 1839. — *Nouv. Ann. de Voyage 1839. Jahrb. für Min. Geog. Geol. und Petrefaktenk. Heidelberg, 1839*.
- DEVILLE (Sainte-Claire) C. J. — Quatre lettres à M. Elie de Beaumont sur l'éruption du Vésuve du 1.^r mai. — *Bull. d. l. Soc. Géol. de France. Vol. XII, Paris 1854-55. Compl. Rend. d. l. Acad. des Sc. Vol. XL-XLI. Paris, 1855. Zeitsch. der Deuts. Geol. Gesell. Bd. VII, Berlin, 1855*.
- DEVILLE (Sainte-Claire) C. J. — Sur la nature et la distribution

- des fumeroles dans l'éruption du Vésuve du 1 mai 1855. — *Bull. d. l. Soc. Géol. de France, Vol. XIII. Paris, 1855-56 in 8°, pp. 55.*
- DEVILLE (Sainte Claire) C. J. — Recherches sur les produits des Volcans de l'Italie Meridionale. — *Compt. Rend. d. l'Acad. T. LXIII, Juin 16, 1856, pp. 5. (C. A.)*
- DEVILLE (Sainte Claire) C. J. — Lettres à M. Elie de Beaumont sur les phénomènes éruptifs de l'Italie Méridionale. — *Compt. Rend. 5^{me}, T. 43, pp. 204-214, july 28, 1855—6^{me}, T. 43, 9^{me} T. 43, pp. 431-435, aug. 25, 1855—7^{me}, T. 43, pp. 533-538, sept. 8th 1855—8^{me}, T. 43, pp. 606-610, Sept. 22nd, 1856 — pp. 681-686 — 10^{me}, T. 43, oct. 20, 1856, pp. 745-751 — 11^{me}, T. 54, jan. 13, 1862, pp. 99-109 — 12^{me}, T. 54, feb. 10, 1862, pp. 241-252 — 13^{me}, T. 54, feb. 17, 1862, pp. 328-339—14^{me}, T. 54, march 5, 1862, pp. 473-483. (C.A.),*
- DEVILLE (Sainte-Claire) C. J. — Sur l'éruption du Vésuve du 1858. — *Bull. d. l. Soc. Géol. d. France. Vol. XV. Paris, 1858.*
- DEVILLE (Sainte-Claire) C. J. and A. Scacchi — Sur la Cotunnite du Vésuve). — *Bull. de la Soc. Géol., 2^{me} Sér., T. XV, pp. 376-377, 1858, also Compt. Rend. d. l'Acad. d. Sc., Vol. 46, pp. 496-497, Paris, 1858. (C. A.)*
- DEVILLE (Sainte-Claire) C. J. — Eruption du Vésuve. — *Compt. Rend. d. l'Acad. des Sc. Vol. LIII. Paris, 1861.*
- DEVILLE (Sainte-Claire), C. J. Le Blanc F, and Fouqué. — Sur les émanations à gaz combustibles qui se sont échappées des fissures de la lave de 1794, à Torre del Greco, lors de la dernière éruption du Vésuve. — *Compt. Rend. l'Acad. d. Sc., Vol. LV, pp. 75-76. Paris, 1862. (C. A.)*
- DEVILLE (Sainte-Claire) C. J. — De la succession des phénomènes éruptifs dans le cratère supérieur du Vésuve après 1861. — *Compt. Rend. d. l'Acad. d. Sc., Vol., LXIII, pp. 7. Paris, 1866.*
- DEVILLE (Sainte-Claire) C. J. — Observations relatives à une communication de M. Palmieri, intitulée : Faits pour servir à l'histoire éruptive du Vésuve. — *Compt. Rend. de l'Acad. des Sc. Vol. LXVI. Paris, 1868.*
- DEVILLE (Sainte-Claire) C. J. — Réflexions au sujet des deux communications de M. Diego Franco sur l'éruption actuelle du Vésuve. — *Compt. Rend. d. l'Acad. des Sc. Vol. LXVII. Paris, 1868.*
- DEVILLE (Sainte-Claire) C. J. — Observations sur la prochaine phase d'activité probable du Vésuve. — *Compt. Rend. d. l'Acad. des Sc. Vol. LXXVI. Paris, 1873.*

- DICKERT. — Relief du Vésuve & du Somma avec dessins géognostiques. — *Bonn, 1849.*
- DIGENSTED E. — Olivin vom Vesuv analysirt. — *Min. Mittheil. Bd. III., Wien, 1873.*
- DION. CASSIUS. — Vesaevi montis conflagratio, Giorgio Merula interprete. — *Milan, 1503, in 4°, fol. LXXVI, (very rare). (C.A.)*
- DOGLIONI N. — Anfiteatro d'Europa etc. — *Venetia, 1632, in 4°. pp. 72 + 1377. At p. 694*
- DOLOMIEU D. de. — Sur l'éruption du Vésuve de l'an 2. — *Journ. de Phys. etc. Vol. LIII, p. 1. (C. A.).*
- DOMENICHI J. — Montis Vesuvii alluvio; ad Lillam. 4 Epigrams in "Castaliae Stillulae". — *Florentiae, 1667, in 8°, pp. 187-190. (C. A.)*
- DONATI E. — Phenomena observed at the last eruption of Mount Vesuvius in 1828. — *Journ. of the R. Inst. of Great Britain Vol. I. London, 1831, Bibliol. Univ. d. Sc. Lett. et Arts. Part. d. Sc. 1 Sér. Vol. II. Genève, 1831.*
- DONATO S. da. (Attributed to). — Discorso filosofico et Astrologico, nel quale si mostra quanto sia corrosivo il Monte Vesuvio dal suo primo incendio sino al presente, e quanto habbi da durare detto Incendio. — *Napoli, 1632 in 4°, fol. IV. (C. A.).*
- DORMAN H. — Ein Vesuvausbruch erimering an den April 1872. — *Naples, 1882, in 8°, pp. 14. (C. A.)*
- DUCHANOT. — Détails sur la dernière éruption du Vésuve 1780. — (?).
- DUCHANOT. — Esatta descrizione dell'ultima eruzione del Vesuvio. — *Osservazione appartenente alla fisica, alla storia naturale ed alle arti. 1780, in 8°, pp. 36. (C. A.)*
- DUFRENOY A. — Terrains volcaniques des environs de Naples. — *Paris, 1838, in 8°. fol. 4, pp. 420, pl. 9, figs. (O. V.). See also Comptes. Rend. Acad. Sc. Paris.*
- DULAC A. — Compte rendu de l'histoire du Vésuve par della Torre. — *Mélanges d'Hist. Nat. Vol. IV., Lyon 1735. pp. 375-401. pl. I.*
- DUPERRON de CASTERA. — Histoire du Mont Vésuve. — *Paris, 1741. (O. V.).*
- DURER G. — Saggio di cataloghi per ordine di materie della libreria antica e moderna. 1° Vulcani e tremuoti. — *Napoli, 1866 in 12, pp. 104.*
- DURIER E. — Le Vésuve en septembre 1878. — (?).
- ELISEO N. A. — Rationalis methodus curandi febres, flagrante Vaesevo subortas. — (*Pars prima*), pp. 160, (*Pars secunda*) fol. 2, pp. 160. *Napoli, 1634, in 8°, (C. A.). Another edition 1645, in 8°, fol. 2, pp. 160, with a fresh frontisp. and dedication.*

- EMANUEL MONACUS — Vita S. Januarii E. M., in greco e latino (At the end a description of the eruption of A. D. 472, followed by another of the eruption of 685. — *Ex typi Montis Cassini, 1875, in large 4°, pp. 32.* (C. A.).
- EMILIO L. d'. — La conflagrazione Vesuviana del 27 aprile 1872. — *Napoli, 1872, in 8.°, fol. IV, pp. 27.* (C. A.).
- ESQUILACE Principe di. — Sonetto. (1631). — *V. de Quinones.* (C. A.).
- ESTATICO (pseudon.) — Dissertazione intorno all'eruzione del Vesuvio del 1751. — ? *In 8.°, pp. 27.* (O. V.).
- EUGENII F. (DE) — Il maraviglioso e tremendo Incendio del Vesuvio detto in Napoli la montagna di Somma nel 1631. — *Napoli, 1631, in 4.° pp. 20.* (C. A.).
- EYLES Sir Francis Haskins. — An account of an Eruption of Mount Vesuvius, in a letter to Phillip C. Webb, from Sir Francis Haskins Eyles. — *Phil. Trans, Vol. LII, 1762, pp. 39-41. Another account of an eruption of Mount Vesuveus.* — *Ibid. pp. 41-43.* (C. A.).
- F. A. A. — Dialoghi sul Vesuvio in occasione dell'eruzione della sera de' 15 giugno 1794. Parlono Aletoscopo e Didascofilo. — *Napoli, 1794, in 8.° pp. 52.* (C. A.).
- FALCO B. DE. — Antiquitates Neapolis, atque amoenissimi ejusdem Agri, ex emendatione, post multas alias editionae latinae, ex italicis factae cura Sigiberti Havercampi. — *Lug. Bat. in fol. pp. 48.*
- FALCONE DELLI B. A. — Gli terrori del titubante Vesuvio. — *Napoli, 1632, in 8.°, pp. 24.* (C. A.).
- FALCONE N. C. — L'intera istoria della famiglia, vita, miracoli, translazione e culto del glorioso martire S. Gennaro. — *Napoli, 1713, in 4.°, fol. VIII, pp. 526 with figures.* (G. A.).
- FALCONE S. — Discorso naturale delle cause ed effetti causati nell'incendio del Monte Vesuvio, con Relatione del tutto. — *Napoli, 1632, in 4.°, fol. XXII.*
- FARIA L. — Relacion cierta y verdadera de el incendio de la montaña de Somma, ecc. — *Napoles, 1631, in small. fol., pp. 8.*
- FARIA L. — Relacion de l'incendio del Vesuvio. — *Napoles, 1632.*
- FARRAR A. S. — On the late eruption of Vesuvius. — *Rep. of the British. Assoc. for the Adv. of Sc. London, 1855.*
- FARRAR A. S. — The earthquake at Melfi in 1851, and recent eruption of Vesuvius in 1855. — *Abst. of Proceed. Ashmodean Soc. N. 34, Oxford, 1856.*
- FAUGAS DE SAINT FOND. — Recherches sur les volcans éteint du Vivarais et du Valay avec un discours sur les volcans brulants. — *Grenoble, 1778, in fol. Max. fol. 2, pp. 20+460, pl. 20, maps. 2.*

- FAUJAS DE SAINT-FOND B. -- Sur l'éruption du Vésuve de l'année dernière. — 1780.
- FAVELLA G. — Abbozzo delle ruine fatte dal Monte di Somma con il seguito incendio insino ad hoggi 23 di Gennaro 1632. — *Napoli, 1632, in 4.º, pp. 16.* (C. A.).
- FELBER. — 1831. — *V. Nesteman.*
- FENICI G. — Lo struppio della Montagna de Somma, in rima napoletana. — *Napoli, 1632: in 8.º, fol. IV.* (C. A.).
- FERBER. — Lettres à Mr. le Chev. de Born sur la mineralogie, et sur divers objets d'histoire naturelle de l'Italie, traduit de l'Allemand, enrichi de notes et d'observations faites sur les lieux par M. de Dietrich. — *Strasburg. 1776, in 8º, pp. 16+508.*
- FER C. G. N. (DE) — Description du mont Vésuve tel que l'auteur l'a vu en 1667. — (?) *fol. I, pl. I.*
- FERRARA M. — Lettera sull'analisi della cenere del Vesuvio eruttata dal 16 al 18 giugno 1794. — *Napoli, 1794, pp. 14.*
- FERREIRA-VILLARINO G. — Vera relatione di un spaventoso prodigio seguito nell'isola di S. Michele alli 2 di settembre di questo presente anno 1630, tradotta dal portoghese in italiano. — 1.st Edition, Roma, 1630, in 8º; 2.^a Edit., Napoli, on the occasion of the eruption of 1631.; 1632, in 12º (fol. 4).
- FIGUIER L. — Revue scientifique (Eruption du Vésuve). — *Feuilleton de la Presse du samedi, 18 Janvier, 1862.* (C. A.).
- FILERT J. C. — De montibus ignovomis. — *Witteb. 1661, in 4º, fol. 11.* (O. V.).
- FILLICIDIO (IL). — del Vesuvio, anacreontica etc. — ?, in 4º, pp. 8.
- FIORDELISI N. — Lettera all' arcidiacono Cagnazzi sulla elettricità della cenere del Vesuvio. — *Giornale Enciclopedico, Napoli 1806, pp. 7 in 8.º* (C. A.).
- FLORENZANO G. — Accanto al Vesuvio. Salmo. — *Napoli, 1872, in 8.º, pp. 12.* (C. A.).
- FLORUS L. A. — L'Heracleade ou Herculanéum enseveli sous la lave du Vesuve. Poeme traduit en vers français avec des notes par I. F. S. Maizony de Laureal. — *Paris, 1837, in 8.º, fol. II, pp. XXI+458, I. map.* (C. A.).
- F. M. D. C. A. T. — Dettaglio su l'antico stato ed eruzioni del Vesuvio colla ragionata relazione della grande eruzione accaduta ai 15 giugno 1794. — *Loc? in 8.º, pp. 16.* (C. A.).
- FONSECA F. (DE) — Observations géognostiques sur la Sarcolite et la Melilite du Mont Somma. — *Bull. d. l. Soc. géol. d. France. Vol. IV. Paris, 1846-47.*
- FONTANELLA GIROLAMO. — L'incendio rinovato del Vesuvio. Ode. — *Napoli, 1632, in 12.º, pp. 24.* (C. A.).

- FORBES J. D. — Remarks on mount Vesuvius. — *The Edinburgh Journ. of Sc.*, Vol. VII. Edinburgh, 1827. *Not. aus dem Gebiete der Natur. und Heilkunde. Bd. XVIII, Erfurt, und Weimar, 1827.*
- FORBES J. D. — Physical notices of the Bay of Naples. N° I. On Mount Vesuvius. — *The Edinburgh Journ. of Sc. Vol. IX. Edinburgh, 1828. (Publ. anonymously).*
- FORBES J. D. — Physical notices of the Bay of Naples: N.° 2. On the buried cities of Herculaneum, Pompeii and Stabiae; With note on Mount Vesuvius. — *The Edinb. Journ. of Sc.*, Vol. X, Edinburgh, 1829.
- FORBES W. A. — A visit to Vesuvius. — *Rep. of the Winchester Coll. of the Nat. Hist. Soc. 1875.*
- FOREST J. — Le Vésuve ancien et moderne. — *Lyon, 1858, in 8.°, pp. 22.*
- FORLEO G. — Meteorico discorso sopra i segni e cause dei terremoti et incendii di diverse parti della terra a causa dell'incendio della montagna di Somma. — *Napoli, 1632. in 4° fol. 6.*
- FOUGEROUX DE BOUDAROY. — Observation sur le Vésuve près de la Ville de Naples. — *Compt. rend. d. l'Ac. d. Sciences. Paris, 1765.*
- FOUGEROUX DE BOUDAROY. — Recherches sur les ruines d'Herculaneum et sur les lumières qui peuvent en résulter relativement à l'état présent des Sciences et des Arts. — *Paris, 1770. pp. XVI+232, pl. III. (C. A.).*
- FOUQUÉ F. LE BLANC ET SAINTE-CLAIRE-DEVILLE. — Sur les émanations à gaz combustibles, qui se sont échappées des fissures de la lave de 1794 à Torre del Greco, lors de la dernière éruption du Vésuve. — *Compt. rend. hebdom. d. Séanc. de l'Acad. des Sc.*, Vol. LV. 1862, Vol. LVI. Paris, 1863.
- FOUQUÉ F. — Étude microscopique et analyse médiate d'une ponce du Vésuve. — *Compt. rend. hebdom. d. Séanc. d. l'Acad. d. Sc. Vol. LXXIX. N. 18, Paris, 1874.*
- FRANCESCO II. — Lettera a S.^a Em. il Cardinale Arc.^o di Napoli pe' danneggiati di Torre del Greco. Eruzione del 1861. — *Napoli, 1862, pp. 11. (C. A.).*
- FRANCO D. — Excursion au cratère du Vésuve le 21 février 1868. — *Comp. rend. hebdom. d. Séances d. l'Acad. d. Sc.*, Vol. LXVI. Paris, 1868. pp. 9.
- FRANCO D. — Excursion faite, le 17 mars 1868, à la nouvelle bouche qui s'est ouverte à la base orientale du Vésuve. — *Compt. rend. hebdom. d. Séanc. d. l'Acad. d. Sc.*, Vol. LXVII. Paris, 1868.

- FRANCO D. — Faits pour servir à l'histoire éruptive du Vésuve. — *Compt. rend. hebdom. d. Séanc. d. l' Acad. d. Sc. Paris, 1868. Vol. LXVI, pp. 159-162.*
- FRANCO D. — L'acido carbonico del Vesuvio. — *Napoli, 1872, in 4.º, pp. 31.*
- FRANCO D. — Sur l'éruption d'avril 1872 au Vésuve. — *Compt. rend. hebdom. d. Séanc. d. l' Acad. d. Sc., Vol. LXXV. Paris, 1872.*
- FRANCO P. — Memorie per servire alla Carta Geologica del Monte Somma. Memoria Prima. — *Rend. R. Accad. Sc. fis. mat. Napoli, fasc. 4º, 1883, pp. 13.*
- FRANCO P. — Il Vesuvio ai tempi di Spartaco e di Strabone. — (*Atti Accad. Pontaniana, Vol. XVII. Napoli, 1887.*)
- FRANCO P. — Ricerche micropetrografiche intorno ad una piro-senandesite trovata nella regione vesuviana. — *Rend. Acc. Sc. fis. e mat. S. II, Vol. 2.º, fasc. 11.º Napoli, 1888.*
- FRANCO P. — I massi rigettati dal Monte di Somma detti lava a breccia. — *Napoli, 1889, in 4º, pp. 16, pl. 1.*
- FRANCO P. — Quale fu la causa che demolì la parte meridionale del cratere di Somma. — *Atti Soc. II. Sc. nat., Vol. XXXI, 1889, pp. 81.*
- FREDA G. — Sulla presenza del molibdeno nella sodalite Vesuviana. — *Rend. d. R. Acc. d. Sc. fis. e mat. Fasc. VII An. 17, Napoli, 1878, pp. 3.*
- FREDA G. — Sulla presenza dell'acido antimonioso in un prodotto Vesuviano. — *Rend. d. R. Acc. d. Sc. Fis. e Mat., Fasc. I, An. 18., Napoli, 1879.*
- FREDA G. — Millerite del Vesuvio. — *Rend. d. R. Acc. d. Sc. fis. e mat. Napoli, maggio e giugno, 1880.*
- FREEMAN. — An Entract of a Letter dated May 2., 1750, relating to the ruins of Herculaneum.. — *Phil. Trans. 1751. Vol. XLVII, pp. 131-142. (G. A.).*
- FROJO G. — Osservazioni geologiche su di un ramo della lava del Vesuvio della eruzione del 1 maggio 1855, — *Ann. Sc. d. V. Janni e N. Buondonno. Vol. III. 1856, in 8º pp. 5.*
- FUCCI P. — La crudelissima guerra, danni, e minacce del superbo campione Vesuvio, etc. — *Napoli, 1632, in 4º, pp. 8. Frontisp. with view of Vesuvius. (C. A.).*
- FUCHS C. W. C. — Die Laven des Vesuv. Untersuchung der vulcanischen Erupt. Producte des Vesuv in ihrer chronologischen Folge, von 11 jahrhundert an bis zur gegenwart. — *Neues Jahrb. f. Miner. Geol. u. Paleont. Stuttgart, 1866.*
- FUCHS C. W. C. — Untersuchungen der Vesuv-Laven. — *Jahrb.*

f. Min. Geol. und Pal. v. Leonh. und Geintz. Stuttgart, 1866-68-69.

FUCHS C. W. C. — Die laven des Vesuv. — *Neus Jahrb f. Min. Geol. und Pal. 1868-1869 — Quart. Journ. Geol. Soc. Vol. XXV, 1869, - Verhand. d. Naturh. Med. ver. z. Heidelberg Bd. V. 1871.*

FUCHS C. W. C. — Bericht über die vulkanischen Ereignisse des Jahres 1872 (Vesuv). — *Tscherm. Min. Mittheil. Wien, 1873.*

FUCHS C. W. C. — Bericht über die vulkanischen Ereignisse des Jahres 1874. — (Vesuv, Aetna etc.) *Tscherm. Min. Mitth. Wien, 1875.*

FUCHS C. W. C. — Bericht über die vulkanischen Ereignisse des Jahres 1875. — (Aetna, Vesuv, etc.) und Erdbeben. *Tscherm. min. Mitth. Bd. II, Wien 1876.*

FUCHS C. W. C. — Die vulkanischen Ereignisse des Jahres 1879, (Vesuv und Aetna, — *Miner. und Petrograph. Mitth. Bd. III, Wien, 1880.*

FURCHHEIM F. — Bibliotheca pompejana. Catalogo ragionato di opere sopra Ercolano e Pompei pubblicate in Italia ed all'estero, dalla scoperta delle due città fino ai tempi più recenti con appendice: Opera sul Vesuvio. — *Napoli, 1879, in 8°, pp. 37. (C. A.).*

F. . . , V — Notizie storiche delle eruzioni del Vesuvio. — *Annali Civ. d. due Sicilie. Napoli, 1833-47, Vol. VII, pp. 31-38.*

GALANTE G. — Breve descrizione della Città di Napoli e del suo contorno, etc. — *Napoli, 1792, in 8°, pp. XVI + 1 + 34. With an appendix, Napoli, 1803, pp. 28.*

GALEOTA O. (Ab. Galiani). — Spaventosissima descrizione dello spaventoso spavento che ci spaventò tutti coll' eruzione del Vesuvio la sera degli 8 d'agosto 1779, ma (per grazia di Dio) durò poco. — *Napoli, 1825, in 8°, pp. 20. (C. A.).*

GALEOTA O. — Spaventosissima descrizione dello spaventoso spavento, che spaventò a tutti quanti la seconda volta colla spaventevole eruzione del Vesuvio alli 15 giugno dell' anno 1794 a due ore scarse di notte, pure come era sortito l'anno 1779., che se ne fece la prima descrizione, che questa è la seconda. — *Napoli, 1794, in 4°, with portrail, pp. 18. (very rare). (C. A.). Another edit. Napoli, 1825, in 8°, pp. 20 (O.V.).*

GALEOTA D. O. — Opera estemporanea all' impronto. — *Napoli, 1795, in 4°, pp. VIII + 23. (O. V.).*

GALIANI F. — Catalogo delle materie appartenenti al Vesuvio contenute nel museo con alcune brevi osservazioni. — *Londra,*

- 1772, in 12°, pp. VIII+184. 2nd edit. Napoli, 1780, in 4°, pp. 18. 3rd edit. Napoli, 1825, in 8°, pp. 20.
- GALIANI F. — Osservazioni sopra il Vesuvio e delle materie appartenenti a questo vulcano ed altri contenuti in questo Museo. — *In the work " Dei vulcani e monti ignivomi "*. (V. Anonymous) — Livorno, 1779.
- GALIANI F. — Spaventosissima descrizione della eruzione del Vesuvio della sera del dì 8 agosto 1779. — Napoli, 1779.
- GALLO M. — Cenno storico sulla fondazione di Ercolano, e sua distruzione, corredato di utili riflessioni sulla natura del Monte Vesuvio, applicabili ancora agli altri Vulcani. — 1.st part (published only) Napoli, 1829, in 8°, pp. XV+81. (C. A.).
- GALLO M. — Saggio storico su la fondazione e distruzione di Ercolano e Pompei. — Napoli, 1835, in 8°, fol. II, pp. 79. (C. A.).
- GAMA G. — Descrizione del tremuoto di Napoli del 15 giugno 1794 e successivo scoppimento flammifero del Vesuvio, etc. Cantò. — Napoli, 1794, in 4°, pp. 36. (O. V.).
- GAMBA B. — Lettere descrittive di celebri Italiani. — 2nd Edit. Venezia, 1819, in 8°, pp. 8+262.
- GARSIA G. A. — I funesti avvenimenti del Vesuvio principati martedì 16 dicembre 1631. — Napoli, 1632, in 4°, pp. 12.
- GARUCCIN G. — La catastrofe di Pompei sotto l'incendio vulcanico del 79 ed il Vesuvio colla produzione dei suoi fuochi. — Napoli, 1872, in 8°, pp. 30. (A. C.).
- GAUDIOSI T. — Sonetto per l'incendio del Vesuvio del 1660. — *Arpa Poetica. Napoli, 1674, in 8°. at p. 63.* (C. A.).
- GAUDRY A. — Sur les coquilles fossiles de la Somma. — *Bull. d. l. Soc. Géol. d. France, Vol. X. Paris, 1852-53.*
- GAUDRY A. — Lettre sur l'état actuel du Vésuve. — *Compt. rend. hebdom. d. Séanc. d. l'Acad. d. Sc. Vol. XLI, pp. 486-87. Paris, 1855.*
- GAVAZZA G. — Sonetto. — V. *Giorgi Urbano.*
- GEMMELLARO G. — Eruzione del Vesuvio. — *Folio 29 dell'Album di Roma, Oct. 1834, pp. 2.* (O. V.).
- GENNARO ANT. DI (Duca di Belforte). — Sonetto sul Vesuvio, diretto al P. Ant. Piaggio. — *Loose sheet.* (C. A.).
- GENNARO ANT. DI. — Poesie. Il Vesuvio, poema in 3 canti. — Napoli, 1795, in 12°, fol. IV, pp. 298+2. (C. A.).
- GENNARO ANT. DI. — Poesie from p. LIII to LIX letter to Amaduzzi on the eruption of 1779. — Napoli, 1797, in 8° (large) IV Vols. (C. A.).
- GENNARO (DE) B. — Historica narratio incendii vesuviani, anno 1631. — Napoli, 1631, in 8° (Mentioned by Soria).

- GENNARO (DI) B. A. — Lettera sopra l'ultima eruzione del Vesuvio dell'anno 1779. — *Vulcani e Monti Ignivomi. Vol. II., (V. Anonimo). Livorno, 1779. Antol. Rom. N. 10, 1779.*
- GENTILI G. — Dei vulcani o monti ignivomi più noti, e distintamente del Vesuvio. — *Livorno. II Vols. in 4°, Vol. I, pp. LXX + 149, Vol. II, pp. VIII + 228, I pl. (C. A.).*
- GERARDI A. — Relatione dell'horribile caso et incendio occorso per l'esalatione del monte di Somma detto Vesuvio vicino la Città di Napoli. — *Roma, 1631, in 4°, fol. IV.*
- GERARDI ANT. — Warhaffte Relation von dem erschröcklichen Erdbidem und Fewrsgelwalt so auss dem Berg zu Somma, Vesuvio genant, nit weit von Neaples entsprungen, im Monat december 1631. — *Augsberg, 1632, in 4° fol. 4. (C. A.).*
- GERI F. — Osservazioni sul Vesuvio. — (?).
- GERNING. — Nachricht von den letzten Ausbruch des Vesuvs. — *Mag. für Physick von Voigt. Bd. X. Gotha, 1795.*
- GERONIMO (DI) B. — Ragguaglio del Vesuvio. — *Benevento, 1737, in 8°, pp. 24.*
- GERVASI E SPANO. — Raccolta di tutte le Vedute che esistevano nel Gabinetto del Duca della Torre, rappresentanti l'eruzioni del Monte Vesuvio fin oggi accadute con le rispettive descrizioni, ora per la prima volta ricavate dalla storia etc. — *Napoli, 1805, pp. 21, pl. XXVII. (C. A.).*
- GEUNS W. J. VAN. — De Vesuvius en zijne geschiedenis. — (?) *in 8°, pp. 267-287. (C. A.).*
- GIACHETTI J. — Apuliae terraemotus defloratio. — *Romae, 1632, in 4° (p. 7.).*
- GIANETTI G. — La vera relatione del prodigio novamente successo nel Vesuvio, etc. — *Napoli, 1631, in 4°, pp. 8.*
- GIANETTI G. — Rime dell'Incendio del Vesuvio. — *Napoli, 1632, in 12°, fol. VIII. (C. A.).*
- GIANNELLI B. — Sulle ceneri vesuviane dell'anno 1779. — (?).
- GIANNETTASII P. N. — Ver Herculaneum. — *Neapoli, 1704, in 8°, fol. IV, pp. 256 engr. frontisp. (C. A.).*
- GIANNONE P. — Lettera scritta ad un amico che lo richiedeva onde avvenisse che nelle due cime del Vesuvio, in quella che butta fiamme ed è la più bassa, la neve lungamente si conservi e nell'altra che è più alta ed intera non vi duri che per pochi giorni. — *Napoli, 1718.*
- GIGLI G. — Discorso sulla zona vulcanica mediterranea. — *Napoli, 1857: in 8°, pp. 146. (C. A.).*
- GIMMA G. — Storia naturale delle Gemme, delle Pietre e di tutti

- i minerali, ovvero fisica sotterranea. — *Napoli, 1703, in 4°, Vol. I, pp. 46 + 551, Vol. II, pp. + 603.*
- GIOENI G. Saggio di litologia Vesuviana. — *Napoli, 1791, in 8°, fol. 6, pp. 272 (O. V.) In German, Wien, 1793, in 8°, pp. 392. (O. V.).*
- GIOENI G. — Versuch einer Lithologie des Vesuvs. — *Vienna, 1793, in 8°, pp. 392. Napoli, 1790, in 8°, pp. XCII + 208 in Ital. also 1791 pp. 272. (C. A.).*
- GIORDANO G. — Sur la dernière éruption du Vésuve, déc. 8, 1861. — *Moniteur, 31 janv. 1862, fol. III.*
- GIORDANO G. — Succinta relazione dell' avvenuto durante l' eruzione del Vesuvio del dì 8 dicembre 1861. — *Atti d. Ist. d. Incor. a Sc. Nat. ed Econ. Vol. X, Napoli, 1864, pp. 507-516.*
- GIORGI URBANO. — Scelta di poesie nell'incendio del Vesuvio. — *Roma, 1632, in 4°, pp. 94, engrav. frontisp. (C. A.).*
- GIOVANELLI D. — Sopra la non antica apertura, o manifestazione dei Lagone di Monte Cerboli nell' agro Volterrano. Note relativa al contenuto nella presente lettera rapporto ai sassi piovuti in Siena. — *Giornale Letterario di Napoli, 1793-1798 Vol. LXI, pp. 3-21.*
- GIOVO N. — Del Vesuvio. Song. — *Napoli, 1737 in fol., fol. II, pp. XXVI. (C. A.).*
- GIRARD A. — Académie des Sciences (Eruption du Vésuve). — *Feuilleton du Journal des Débats du 28 mars 1862. (C. A.).*
- GIROLAMO MARIA DI S. ANNA F. — Aggiunta all'Istoria della vita, virtù e miracoli di S. Gennaro vescovo e martire principal padrone della fedelissima Città, e Regno di Napoli. Nella quale si rapportano varie erudizioni, e molte curiose notizie. — *Napoli, 1710, in 4°, pp. 70. (C. A.). Other editions.*
- GIROS S. — Veridica relazione circa l'ultima eruzione del Vesuvio accaduta ai 15 giugno per tutto luglio del 1794. — *Napoli, 1794, in 8°, pp. XXXV.*
- GIUDICE (DEL) F. — Brevi considerazioni intorno ad alcuni più costanti fenomeni vesuviani. — *Atti d. R. Ist. d'Incor. a Sc. Nat. ed Econ. Napoli, 1855, in 4°, pp. 67, pl. VII.*
- GIUDICE R. — Lettera relativa all' eruzione del Vesuvio dell' anno 1804. — *Magazzino di Lett. Sc. Arti, Firenze, feb. 1805, in 8°, pp. 7. (O. V.).*
- GIULIANI G. B. — Trattato del Vesuvio e de' suoi incendii. — *Napoli, 1632, in 4°, pp. X + 224, pl. II. Engrav. frontisp.*
- GIUSTINIANI L. — La biblioteca storica e topografica del Regno di Napoli (From pp. 215 to 228 refers to Vesuvius). — *Napoli 1793, in 4°, pp. XV + 241. (C. A.).*

- GIUSTO L. — Biverbio del Sebeto col Vesuvio su gl'insetti microscopici del Colera. — ?, in 8°, pp. 16.
- GIUSTO P. — Progetto di Associazione per compensamento dei danni che il Vesuvio può recare ai paesi messi sul suo pendio ed alla sua base. — *Napoli*, 1862 and 1872, in 4.°, pp. 24. (C. A.).
- GLIELMO A. — L'incendio del Monte Vesuvio, etc. del 1631. — *Napoli*, 1632 and 1634, in 12.°, pp. 185. *Two editions*.
- GMELIN L. — Observationes oryctognosticae et chimicae de Haüyana. — *Heidelbergae*, 1814, in 8°, pp. 6 + 58, pl. 1, figs. (O. V.).
- GMELIN L. — Chemische Untersuchung eines blauen Fossils vom Vesuv und des Lasursteins. — (?)
- GORCEIX H. — Etat du Vésuve et des dégagements gazeux des Champs Phlégréens au mois de juin 1869. — *Compt. Rend. hebdom. des Séanc. d. l'Acad. d. Sc. Vol. LXXIV. Paris*, 1872.
- GORI A. F. — Notizie del memorabile scoprimento dell'antica Città Ercolano, etc. — *Firenze*, 1748. in 8°, pp. XX + 106, pl. 2.
- GRANDE DE LORENZANA F. — Brebe compendio del lamentabile ynzendio del Monte di Soma. — *En Napoles*, 1632, in 8° (p. 16).
- GRANVILLE A. AND BORZI. — A report on a Memoire of Sig. Monticelli entitled: Descrizione dell'Eruzione del Vesuvio avvenuta nei giorni 25, 26 Dic. 1813. — (?)
- GRAVINA C. — Poesie. — *Calania*, 1834, in 12°, at p. 10. (B. N.).
- GRAYDON G. — On the Dykes of Monte Somma in Italy. — (?)
- GRIFONI H. — Vue du cratère du Vésuve après l'éruption d'Octobre 1822. Dessin par Griffoni, écrit par Marco di Pietro. — (?) *Plate and description*. (C. A.).
- GROSSI G. B. G. — Ragionamento per i Comuni Vesuviani, Isola del Cratere, ecc. contro il Commune di Sarno, ed altri. Nel Consiglio d'Intendenza di Salerno. — *Napoli*, 1817, in 4.°, (B. N.).
- GUARINI G. — Analisi chimica d'un prodotto vesuviano. — *Resoconto d. Acc. d. Sc. d. Napoli*, tornata 5 settembre 1833, in 4.°, fol. 2. (C. A.).
- GUARINI G. — Analisi chimica della sabbia caduta in Napoli la sera de' 26 agosto 1834. — *Atti R. Ac. d. Sc. Napoli 2 dicembre 1834*, Vol. V, pt. 2^a, pp. 233-237. *Atti R. Ist. Incorag. Sc. Nat. Napoli. Vol. V, pt. 2, pp. 233-237*.
- GUARINI G. — Saggi analitici sopra taluni prodotti vesuviani (1832) — *Atti d. R. Acc. Sc. fis. e mat. Vol. V. Parte 2.^a Napoli*, 1843.
- GUARINI G. — Analisi chimica di un prodotto Vesuviano (1833) —

- Atti d. Acc. d. Sc. Fis. e Mat. Vol. V. Parte 2.^a Napoli, 1843.*
- GUARINI G. — Saggi analitici su talune sostanze vesuviane (1834)—
Atti d. Accad. d. Sc. fis. e mat. Vol. V. Parte 2.^a Napoli, 1843.
- GUARINI G., SEMENTINI L. — Saggi analitici su talune sostanze vesuviane. — *Atti d. R. Acc. d. Sc. d. Nap. 1834, in 4.^o, fol. 2. (C. A.). Atti R. Ist. Incorag. Sc. Nat. Napoli. Vol. V. pt. 2, pp. 169-177.*
- GUARINI G., PALMIERI L. and SCACCHI A. — Memoria sullo incendio vesuviano del mese di maggio 1855, preceduta dalla Relazione dell'altro incendio del 1850. — *In 4.^o, pp. 208, with 7 plates, Napoli, 1855.*
- GUARINI R. — Poemata varia. — *Neapoli, 1821, in 12^o, pp. 5-192.*
- GUICCIARDINI C. — Mercurius Campanus praecipua Campaniae Felicis loca indicans, et perlustrans. — *Neapoli, 1657, in 12^o, fol. 6, pp. 273. (O. V.).*
- GUIDICCIONI L. — De Vesevo Monte, epigramma. — *See Giorgi Urbano.*
- GUILLAUMANCHES-DUBOSCAGE G. P. I. DE. — Relation de l'éruption du Vésuve en 1822, suivie 1.^o de l'observation d'un phénomène qui constate les moyens que la nature employe pour alimenter les volcans; 2.^o de la comparaison de l'éruption de 1822 avec celle ou Herculaneum et Pompeii furent engloutis; à la suite est un aperçu sur les anciens volcans. — *Aix, 1823, in 8.^o pp. 54, fol. 1. (C. A.).*
- GUIRAUD DR. — L'éruption du Vésuve en avril 1872. — *Recueil d. Soc. Sc. Bel. Lett. et Arts de Tarn-et-Garonne. Montauban, 1872, tir. à part, in 8.^o, pp. 32. (C. A.).*
- GUISCARDI G. — Del solfato potassico trovato nel cratere del Vesuvio nel Nov. e Dic. 1848. — *Napoli, 1849, in 8^o, pp. 11, pl. 1, figs.*
- GUISCARDI G. — Lettera all' egregio prof. A. Scacchi sullo stato del Vesuvio. — *Napoli, 1855, in 8^o, fol. 2, pl. 1, pp. 407-412, fig. 1.*
- GUISCARDI G. — Sopra un minerale del Monte Somma (Guarinite)—
Atti R. Accad. d. Sc. fis. e mat., Vol. II. Napoli, 1855-57. figs.
- GUISCARDI G. — Fauna fossile vesuviana. — *Napoli, 1856, in 8^o, pp. 16.*
- GUISCARDI G. — Notizie del Vesuvio. — “ *Giambattista Vico* ”
Vol. I, pp. 132-134, Vol. II, pp. 137-139, Vol. III, pp. 457-461, Vol. IV, pp. 136-137, 314-315, Napoli, 1857, separate extracts in 8^o, pp. 14. (C. A.).

- GUISCARDI G. — Notizie vesuviane. — “*Giambattista Vico*” 1857, in 8°, pp. 14.
- GUISCARDI G. — Sublimazioni verdiccie sulle scorie d'una fumarola apparsa nel Vesuvio. — *Ann. d. R. Oss. Vesuviano. Napoli*, 1859.
- GUISCARDI G. — Analisi chimica della Wollastonite del Monte Somma — ? 1861.
- GUISCARDI G. — Sechs Briefe ueber den Vesuv an Herrn Roth, Neapel, 16 Juni 1861. — *Zeits. d. d. geol. Gesells. t. IX*, pp. 383-386. *M. S. copy.* (C. A.).
- GUISCARDI G. — Sur l'éruption du Vésuve, lettre à M. Deville. — *Compt. Rend. Ac. Sc., Vol. LIII*, pp. 1233-1236, *Paris*, 1861. (C. A.).
- GUISCARDI G. — Notizie vesuviane. — *Rendiconto R. Acc. Sc. Napoli. Luglio 1862*, in 4.° pp. 2. (C. A.).
- GUISCARDI G. — Lettres sur la dernière éruption du Vésuve. — *Compt. Rend. hebdom. d. l' Acad. d. Sc. Vol. LXXV. Paris*, 1872.
- GUISCARDI G. — Sulla genesi della Tenorite nelle fumarole del Vesuvio. — *Rendiconto R. Acc. di Sc. d. Napoli. Fasc. 4.° 1873*, in 4.° pp. 4.
- GUISCARDI G. — Sulla Guarinite. — *Rend. R. Accad. Sc. Napoli, 1.° fasc. 1876*, in 4.° pp. 4. (C. A.).
- GUISCARDI G. — Ueber den Guarinite, eine neue Mineralspecies vom Monte Somma. — (*Abdruck a. d. Zeitschr. d. deutschen geolog. Gesells. 1858*) fol. 2..... Risposta del Prof. Guiscardi. — *Rend. R. Acc. Sc. Napoli. Fasc. 1.°, 1876*, fol. 2. (C.A.).
- GUISCARDI G. UND ROTH H. — Ueber Erscheinungen am Vesuv. — *Neapel den 8 Februar 1880*.
- GUISCARDI G. — Descrizione dello stato attuale del cratere del Vesuvio. — *Annali Scientifici, Giorn. Sc. Fis. Nat. Agric. etc. Vol. II*, pp. 249-251.
- GUISCARDI G. — Sulla presenza di combinazioni del titanio e del boro in alcune sublimazioni vesuviane. — *Rendicont. d. Acc. d. Sc. d. Napoli*, in 4.° pp. 3. (C. A.).
- GUISCARDI G. — Ueber die neuesten Kraterveränderungen und Ausbrüche des Vesuvs. — (?)
- GUTTENBERG. — Eruption du Mont Vésuve du 14 mai 1771. — *Naples. A plate.* (C. A.).
- GUTTENBERG. — Vue de la sommité et du cratère du Vésuve au moment de l'Eruption du 8 Août 1779. — ? (C. A.).
- H... — Sur le Vésuve. — *Two articles in the “Journal d. l'Empire, 6 and 10 nov. 1807.* (C. A.).

- HADINGER W. — On the sodalite of Vesuvius. — *The Edinburgh Philos. Journ.* Vol. XIII. Edinburgh, 1825.
- HALL E. — 1872. — See *Haughton*.
- HAMILTON W. — Observations on Vesuvius, Aetna and other volcanoes. — London, 1773, in 8°, fol. 2, pp. 180, pl. 6, figs. Also same, London, 1774, and 1783.
- HAMILTON W. — Beobachtungen über den Vesuv, den Aetna und andere Vulcane in einer Reihe von Briefen. — Berlin, 1773, in 8°, pp. 196, fol. 2, pl. 6, figs.
- HAMILTON W. — Observations on mount Vesuvius, mount Etna and other Volcanoes in a series of letters to the Royal Society— *Philosoph. Transactions of the R. Soc. of London.* Vol. LVII-LXI. London. 1774, in 8°, pp. IV + 79, pl. 5, map. 1. (Separate edition in same year).
- HAMILTON W. — Campi Phlegraci. — Napoli, 1776, Vol. I, pp. 90, map. I, pl. 2, frontisp., Vol. II, fol. 53, pl. 53, frontisp. Vol. III, pp. 29, fol. 6, pl. 5, frontisp.
- HAMILTON W. — Supplement to the Campi Phlegraci being an account of the great eruption of mount Vesuvius in August 1779 (in English and French). — Naples, 1779, in fol. pp. 29, col. pl. 5.
- HAMILTON W. — Nachrichten von den neuesten Entdeckungen in der J. C. 79 am 24 August durch den Ausbruch des Vesuv verschuetteten Stadt Pompeji mit einigen Zusaetzen begleitet, von Cristoph Gottgeb. von Murr. — Nuernberg, 1780, in 4° fol. 2, pp. 26, pl. 3.
- HAMILTON W. — Oeuvres complètes, traduites et commentées par l'abbé Giraud-Soulavie. — Paris, 1781, in 8°, pp. XX + 506, map. 1. (C. A.).
- HAMILTON W. — Warnee mingen over de vunnbergen in Italie, Sicilie en omstrecks den Rhyn. — Amsterdam, 1784, in 8°, pp. 16 + 55, fol. 4, pl. 2, (O. V.).
- HAMILTON W. — Some particulars of the present state of mount Vesuvius; with the account of a journey into the Province of Abruzzo, and a voyage to the island of Ponza. — *Philos. Transact. of the R. Soc. of London.* Vol. LXXVI. London, 1786, pp. 19, map. 1. Dresden, 1787. (In German).
- HAMILTON W. — Bericht vom gegenwaertigen Zustande des Vesuv und Beschreibung einer Reise in die Provinz Abruzzo und nach der Insel Ponza. — Dresden, 1787.
- HAMILTON W. — An account of the late eruption of mount Vesuvius. — *Philosph. Transact. of the R. Soc. of London.* London, 1795, pp. 73-116, pl. 7.

- HAMILTON W. — Campi Phlegraci. — *Paris, l'an septième (1799)* in fol. *Atl. fol. 60, pl. 60.* (O. V.).
- HANSEL V. — Mikroskopische Untersuchung der Vesuvlava vom Jahre 1878. — *Mineral. und Petrograph. Mittheil., Band II, Wien, 1879.*
- HAUGHTON S. and HALL E. — Report on the chemical, mineralogical and microscopical characters of the lavas of Vesuvius from 1631 to 1868. — *Transact. of the R. Irish Ac., Vol. XXVI, Dublin, 1875.*
- HEIM A. — Der Ausbruch des Vesuv im April 1872. — *Basel, 1873, in 8°, pp. XV+52, pl. 4.*
- HEIM A. — Der Vesuv im April 1873. — *Zeitsch. d. Deut. Geol. Gesell. Bd. XXV, Berlin, 1873.*
- HELBIG. — Untersuchungen über die campanische Wandmalerei. — *Leipzig, 1883, p. 105.*
- HELLWALD (von) F. — Historische Nachrichten ueber den Vesuv.-(?).
- HERBINII J. — Dissertationes de admirandis mundi Cataractis supra et subterraneis etc. — *Amstelodami, 1678, in 4. pp. 14 + 267 + 17, figs.*
- HESSENBERG F. — Magnesiaglimmer. (Biotit) vom Vesuv. Mineral. Notiz von Hessen. — *Frankfurt, 1861.*
- HESSENBERG F. — Titanit vom Vesuv. Mineral. Notiz von Hessen. — *Frankfurt, 1861.*
- HIMMEL. — Nachricht von dem Ausbruche des Vesuvs am 15 Junius. — (?).
- HOCHSTETTER (von) F. — Die Phlegräischen Felder und der Vesuv.-(?)
- HOFFMAN F. — Mémoire sur les terrains volcaniques de Naples, de la Sicile, et des isles de Lipari. — *Bull. d. l. Soc. géol de France, Vol. III. 1833, pp. 170-180.*
- HOMBRES-FIRMAS L. A. (D') — Souvenirs de voyage aux environs du Vésuve. — *Bull. d. l. Soc. Géogr. Tom. XVII. Paris, 1842. pp. 205-213.*
- HON H. (LE) — Histoire complète de la grande éruption du Vésuve de 1631. — *Bull. d. l'Acad. R. d. Sc. Lett. et Beaux-Arts de Belgique. Vol. XX, Bruxelles, 1865-1866*
- HOSPITAL MARCHESE DE L'. — Memoria sopra la Città sotteranea scoperta a' piedi del Monte Vesuvio. — *Raccolta di Opuscoli Sc. e Filos. Venezia, 1727-38-57, Vols. LI, in 12°, figs. See V. XLI, pp. 1-61.*
- HOWARE J. — Observations on the heat of the ground of Vesuvius. — *Philosoph. Transact. of the R. Soc. of London, Vol LXI, London, 1771. (Also in French) Journ. d. Phys., T. XIII, pp. 224, 1779.*

- HUERTA A. (DE) — Sonetto. — *See De Quinones.*
- HURTADO DE MENDOÇA A. — Dezimas. — *See De Quinones.*
- IL FILLICIDIO. — Vesuvio. Anacreontica. — ? in 4°, pp. VIII. (C. A.).
- IMBERT DE VILLEFOSSE. — Vue du Mont Vésuve et de son éruption arrivée le 25 octobre 1751 à 10 heures du soir. — *Fol. I.* (C. A.).
- INCARNATO C. — Prodigium Vesevi Montis, etc. — *Neapoli, 1632, in 4°, pp. 7. Another edition in 8°.*
- INCREDULO ACCADEMICO INCANTO. — Incendio del Vesuvio. Ode. — *Napoli, 1632, in 12°.* (B. N.).
- INCREDULO ACCADEMICO INCANTO. — Le Querele di Bacco per l'incendio del Vesuvio. Ode. — *Napoli, 1632, in 4°, pp. 16,* (B. N.).
- INOSTRANZEFF (von) A. — Historische Skizze der Thätigkeit des Vesuvs vom Jahre 1857 bis jetzt. — *St. Petersburg, 1872.*
- INOSTRANZEFF (von) A. — Ueber die Mikrostructur der Vesuv-Lava vom Septemb. 1871, März und April 1872. — *St. Petersburg, 1872.*
- INSENSATO ACCADEMICO FURIOSO. — L'afflitta Partenope per l'incendio del Vesuvio al suo glorioso Protettore S. Gennaro. — *Napoli, 1632, in 12°, fol. 8.* (C. A.).
- ISABEY I. — Cratère du Vésuve après l'éruption de 1822. — (C. A.).
- ISE A. — Fussreise vom Brocken auf den Vesuv und Rueckkehr in die Heimat. — *Leipzig, 1820, in 8°, pp. XII+234, pl. 1.* (C. A.).
- ITTIGIUS G. — De Montum incendiis. — *Lipsiae, 1671, in 8°, fol. 8, pp. 342, fol. V,* (O. V.).
- IZZO S. — Altra Relazione del Monte Vesuvio. — *Gazzetta (Supplemento) Napolitana Civica Commenc. N.º 76, 1804?.* (B. N.).
- JADELOT L'AB. — Mechanisme de la nature, ou Système du Monde fondé sur les forces du feu, etc. — *Londres, 1787, in 8°, pp. XVI+259. See pp. 209-259.*
- JAMES C. — Voyage scientifique à Naples. — *Paris, 1844, in 8°, pp. 103* (O. V.).
- JAMINEAU J. — An extract of the substance of three letters concerning the late eruption of Mount Vesuvius. — *Philosoph. Transact. of the R. Soc. of London. Vol. XLIX, London, 1755, pp. 24-28.*
- JAMINEAU J. — Eruption of Vesuvius in December 1754. — *Philosoph. Transact. of the R. Soc. of London, Vol. XLIX. London, 1755.*
- JANNACE V. — La storia d'havere timore, e gran spavento dello foco dello inferno, lo quale si è scoperto per causa de li no-

stri peccati nella montagna di Somma la quale si è aperta, e buttato lingue di foco, e cenere, e pietre che ha consumato tridece tra terre e casali intorno di se, li quali segni ci ha mostrato Iddio per nostro beneficio. E questo, e successo di martidi matino alli 16 di dicembre 1631. — *Napoli, 1632 in 12°, fol. 6. (C. A.).*

JANUARIO F. (DE) — Felicis Campaniae Hilaritas tumolata. — *Neapoli, 1632, fol. (C. A.).*

JATTA G. — Discorso sulla ripartizione Civile, e Chiesastica dell'antico agro Cumano, Misenate, etc. — *Napoli, 1843, in 8°, pp. VIII + 242.*

JAUCOURT DE. — Vésuve. — *Article of "Encyclopédie." Genève, in 4°, pp. 330-334. (C. A.).*

JERVIS G. — Tesori sotterranei dell'Italia. — 4, Vol. in 8°, Torino, 1874-1888, numerous plates.

JOHNS C. A. — Vesuvius previous to, and during the eruption of 1872 — (?)

JOHNSTON-LAVIS H. J. — A visit to Vesuvius during an eruption — "*Science Gossip.*" N.° 181, January 1880, pp. 9-10.

JOHNSTON-LAVIS H. J. — Note on the comparative specific gravities of molten and solidified Vesuvian lavas. — *Quart. Journ. Geol. Soc. Lond. Vol. XXXVIII, 1880, p. 240-241.*

JOHNSTON-LAVIS H. J. — Volcanic cones, their structure and mode of formation. — "*Science Gossip.*" N.° 190, Oct. 1880, pp. 220-223, fig. 1.

JOHNSTON-LAVIS H. J. — On the origin and structure of Volcanic cones. — "*Science Gossip.*" N.° 193, Jan. 1881, pp. 12-14, fig. 4.

JOHNSTON-LAVIS H. J. — Diary of Vesuvius from Jan. 1st to July 16th 1882. — "*Nature*" Vol. XXIV, 1882, pp. 455-456, fig. 2.

JOHNSTON-LAVIS H. J. — The late eruption of Vesuvius. — "*Nature*," Vol. XXIX, 1884, p. 291.

JOHNSTON-LAVIS H. J. — The Geology of Monte Somma and Vesuvius, being a study in Vulcanology. — *Quart. Journ. Geol. Soc. Lond., Vol. XL, 1884, pp. 35-112, with 2 woodcuts and 1 cromolithographic plate.*

JOHNSTON-LAVIS H. J. — First Report of the committee for the investigation of the Volcanic phenomena of Vesuvius and its neighbourhood. — *Brit. Assoc. Reports, 1885, pp. 2.*

JOHNSTON-LAVIS H. J. — The new outburst of lava from Vesuvius. — "*Nature.*" Vol. XXXII, pp. 55-108.

JOHNSTON-LAVIS H. J. — The physical conditions involved in the

- injection, extrusion and cooling of igneous matter. — *Quart. Journ. Geol. Soc. Lond. Vol. XLI, 1885, pp. 103-106.*
- JOHNSTON-LAVIS H. J. — Notes on Vesuvius from February 4th to August 7th 1886. — *Nature, Vol. XXXIII, 1886, p. 557.*
- JOHNSTON-LAVIS H. J. — On the fragmentary ejectamenta of Volcanoes. — *Proceed. Geol. Assoc. Vol. IX. 1886, pp. 421-432, fig. 3.*
- JOHNSTON-LAVIS H. J. — Second Report of the committee for the investigation of the Volcanic phenomena of Vesuvius and its neighbourhood. — *Brit. Assoc. Reports. 1886, pp. 3, also "Nature" Vol. XXXIV, p. 481.*
- JOHNSTON-LAVIS H. J. — Sounding a crater, fusion points, pyrometers, and seismometers. — *"Nature" Vol. XXXV, p. 197.*
- JOHNSTON-LAVIS H. J. — The relationship of the activity of Vesuvius to certain meteorological and astronomical phenomena. — *Proceed. Royal. Soc. Lond. 1886, N.º 253, p. 1.*
- JOHNSTON-LAVIS H. J. — The relationship of the structure of igneous rocks to the conditions of their formation. — *Scientific, Proceed. R. Dublin Soc. Vol. V., N.º S., pp. 112-156.*
- JOHNSTON-LAVIS H. J. — Vesuvian eruption of February 4th 1886. — *Nature, Vol. XXXIII, 1886, p. 367.*
- JOHNSTON-LAVIS H. J. — Diario dei fenomeni avvenuti al Vesuvio da luglio 1882 ad agosto 1886. — *"Lo Spettatore del Vesuvio e dei Campi Flegrei." Nuova serie pubblicata a cura e a spese della Sezione Napoletana del Club Alpino Ital. Furchheim Napoli, 1887, in 4º, pp. 81-103, with 13 photo-engravings.*
- JOHNSTON-LAVIS H. J. — L'eruzione del Vesuvio nel 2 Maggio 1885. — *Ann. d. Accad. O. Costa d. Aspiranti Naturalisti. Era 3. Vol. I, 1887, Naples, pp. 8 with 1 photo-engraving and 1 cromolithograph.*
- JOHNSTON-LAVIS H. J. — Third Report of the committee appointed for the investigation of the Volcanic phenomena of Vesuvius and its neighbourhood. — *Brit. Assoc. Reports, 1887, pp. 3.*
- JOHNSTON-LAVIS H. J. — Fourth report of the committee for the investigation of the Volcanic phenomena of Vesuvius and its neighbourhood. — *Brit. Assoc. Reports, 1888, pp. 7.*
- JOHNSTON-LAVIS H. J. — Further observations on the form of Vesuvius and Monte Somma. — *Geol. Magaz. dec. III, Vol. V, London, 1888, pp. 445-451, fig. 1.*
- JOHNSTON-LAVIS H. J. — Note on a Mass containing metallic iron found on Vesuvius. — *Brit. Assoc. Report. 1888, pp. 2.*
- JOHNSTON-LAVIS H. J. — The Conservation of Heat in Volcanic Chimneys. — *Brit. Assoc. Reports, 1888, pp. 2.*

- JOHNSTON-LAVIS H. J. — The ejected blocks of Monte Somma. Part I. Stratified limestones, — *Quart. Journ. Geol. Soc.*, Vol. XLIV, 1888, pp. 94-97.
- JOHNSTON-LAVIS H. J. — Fifth report of the committee appointed for the investigation of the Volcanic phenomena of Vesuvius and its neighbourhood. — *Brit. Ass. Reports*, 1889, pp. 12 with 5 woodcuts.
- JOHNSTON-LAVIS H. J. — Il pozzo Artesiano di Ponticelli. — *Rend. d. R. Accad. d. Sc. Fis. e Mat. d. Napoli*, giugno 1889, pp. 7.
- JOHNSTON-LAVIS H. J. — L'état actuel du Vésuve. — *Bull. Soc. Belge de Géologie, Hydrologie et Paléontol.*, Vol. III, 1889, pp. 1-11, fig. 3.
- JOHNSTON-LAVIS H. J. — The new eruption of Vesuvius. — "*Nature*" Vol. XL, 1889, p. 34.
- JOHNSTON-LAVIS H. J. — The recent activity of Vesuvius. — *Nature*, Vol. XXXIX, 1889, pp. 184.
- JOHNSTON-LAVIS H. J. — The state of Vesuvius. — *Ibid*, pp. 302-303.
- JOHNSTON-LAVIS H. J. — Viaggio scientifico alle regioni vulcaniche italiane nella ricorrenza del centenario del "Viaggio alle due Sicilie" di Lazzaro Spallanzani. — (*This is the programme of the excursion of the English geologists that visited the south Italian volcanoes under the direction of the author. It is here included as it contains various new and unpublished observations*) *Napoli*, 1889, in 8°, pp. 1-10.
- JOHNSTON-LAVIS H. J. — Sixth report of the committee appointed for the investigation of Vesuvius and its neighbourhood. — *Brit. Assoc. Reports. Leeds meeting. London*, 1890, pp. 14, fig. 3.
- JOHNSTON-LAVIS H. J. — Geological Map of Vesuvius and Monte Somma with a short explanation. Scale 1:10.000. Constructed intirely by the author during the years 1880-1888. — *Philip. and Son. 32 Fleet St. London*, 1891. (*Also Italian Edition, 1891*).
- JONGSTE DE CLASSENS E. A. — Souvenir d'une promenade au Mont Vésuve. — *Naples*, 1841, in 8°, pp. 61.
- JORDANUS FABIVS. — De Vesuvio monte (1631). — *M. S. in the Bibl. Brancacciana*, in 8°, pp. 60, Copy. (C. A.)
- JORIO A. DE. — Notizie su gli scavi di Ercolano. — *Napoli*, 1827 in 8°, pp. 122, pl. 5. (C. A.).
- JUDD W. J. — Contributions to the study of Volcanoes. — *Geol. Mag. Vol. II, London*, 1876.
- KENNGOTT A. — Remerkungen über die Zusammensetzung einer Vesuvlava. — *Zeitsch. f. d. ges. Naturw. Bd. XV. Berlin*, 1860.

- KENNGOTT A.—Pyrit, Calcit, Anorthit vom Vesuv.—*Vierteljahrssch. der Naturf. Gesell. in Zuerich*, Bd. XIV, Zuerich, 1869.
- KENNGOTT A. — Salmiak vom Vesuv.—*Vierteljahrssch. der Naturf. Gesell. in Zuerich*. Bd. XV, Zuerich, 1870.
- KERNOT F. — L'Acqua Filangieri minerale acidolo-alcalina con l'analisi quantitativa del Prof. R. Monteferrante. — *Napoli*, 1873, in 8°, pl. 1.
- KIRCHERII A. — Diatribae de prodigiosis crucibus quae tam supra vestes hominum, quam res alias non pridem post ultimum incendium Vesuvii Montis, Neapolis comparuerunt. — *Rome*, 1661, in 8°, fol. 4, pp. 103, pl. 1. (C. A.).
- KIRCHERII A. — Mundus subterraneus. — *Amstelodami*, 1665 and again in 1678, Vol. I, pp. 18 + 266 + 6, Vol. II, pp. 8 + 507 + 9. Numerous figs.
- KLAPROTH. — Risultato dell' analisi di alcune sostanze minerali. Referring to incrustations, etc. of sulphates in an opening in the Vesuvian cone. — *Giorn. Lett. di Napoli*, 1793-1798, Vol. XC. pp. 81-104.
- KLUGE. — Verzeichniss der Erdbeben und vulkanischen Eruptionen und der dieselben begleitenden Erscheinungen in den Jahren 1855 und 1856. — *Allg. Deut. Nat. Zeit.* Vol. XVIII, pp. 361-416. (C. A.).
- KOBELL (von) F. — Analyse eines sinterartigen Minerals vom Vesuv. — *Gelehrte Anzeigen; herausg. v. Mitgl. d. Kön. Bayr. Akad. d. Wissensch.* Bd. XXI, München, 1845.
- KOESTLIN C. H. — Examen mineralogico-chemicum materiei, quae Herculaneum et Pompejos anno 79 aerae Christ sepeclivit. — *Fasciculus animadversionum phisiologici atque mineralogico-chimici argumenti.* Stuttgartiae, 1780, in 4°, (C. A.).
- KOKSCHAROW (von) N. — Ueber den zweiaxigen Glimmer vom Vesuv (1854). — *Ann. der Physik und Chemie.* Bd. XCIV, Leipzig 1855. *Bull. d. l. Classe Phys. Mathém. d. l' Acad. Impér. des Sc. de St. Pétersbourg.* Vol. XIII. St. Pétersbourg, 1855.
- KOKSCHAROW (von) N. — Messungen eines besonders vollkommen ausgebildeten Anorthitcrystals vom Vesuv.—*Bull. d. l. Classe Phys. Mathém. de l' Acad. Impér. des Sc. de St. Pétersb.* Vol. VII, N. S. St. Pétersbourg, 1864.
- KOKSCHAROW (von) N.—Ueber den Glimmer vom Vesuv.—*Materiatien zur Miner. Russlands.* B. VII. St. Petersburg, 1875.
- KREUTZ F. — Mikroskopische Untersuchungen der Vesuv-Laven vom Jahre 1868. — *Anzeiger der Akad. der Wiss.* Bd. IV. Berlin, 1869.

- KURR. — Ueber den letzten Ausbruch des Vesuvs im December 1861. — *Jahresh. d. Ver. f. vaterl. Naturk. in Württemberg Bd. XIX, Stuttgart, 1863.*
- LA CAVA P. — Sulla efflorescenza della soda clorurata che trovasi in taluni fumaiuoli attivi del Vesuvio; memoria.—*Rendicont. R. Accad. Sci. Napoli, 1840, in 8°, pp. 6. (C. A.).*
- LA CAVA P. — Rapporto sui cambiamenti avvenuti al Vesuvio dal 27 dicembre al 19 marzo 1843. — ?, *in 8°, pp. 12 (O. V.).*
- LALANDE (de).—Relation de la dernière éruption du Vésuve, Août 1779. — *Journ. d. Savants. Paris, janvier 1781, in 12°, pp. 103-114.*
- LALANDE (de). — Du Mont Vésuve et de la nature des laves. — (*dans le "Voyage en Italie"*). *Paris, 1779, T. VII, pp. 153-206. 2nd Edit. 1786. 3me Edit. Genève, 1790, Vol. VII. in 8°, with an atlas in 4°, pl. 35.*
- LANCELOTTI J. — Epistolae tres: I, De Incendio Vesuvii; II, De Stabiis; III, De petitione Magistratura. — *Neapolis, 1784, in 8°, pp. 30.*
- LANDGREBE G. — Mineralogie der Vulcane. — *Cassel und Leipzig, 1870, in 8°.*
- LANELFI. — Incendio del Vesuvio. — *Napoli, 1632. in 4°, fol. 8, figs.*
- LANZA. — *See Liberatore.*
- LASAULX (von) A. — Dünnschliffe der Vesuv-Lava der Eruption vom April dieses Jahres. — *Sitzungsb. der niederrhein. Gesell. in Bonn. B. XXIX. Bonn, 1872.*
- LASAULX (von) A. — Microscopische Untersuchung der neuesten Lava vom Vesuv. — *Neues Jahrb. f. Mineral. Geol. u. Pal. B. XL. Stuttgart, 1872.*
- LASENA P. — Dell'antico Ginnasio Napoletano. — *Roma, 1641, in 4°, pp. 3 + 292, At pp. 77-84.*
- LATINA. — Lo scalco alla moderna, ovvero l'arte di ben disporre li conviti. — *Napoli, 1692-94, 2 Vol. in 4°, In Vol. II at pp. 234-238, the eruption of Vesuvius is described of April 12th 1694.*
- LAUGEL A. — Sur l'éruption du Vésuve du 8 déc. 1861. — *Moniteur de la Côte d'Or. jan. 1862, fol. 3.*
- LAUGIER A. — Examen chimique d'un fragment d'une masse saline considérable rejetée par le Vésuve dans l'éruption de 1822. — *Mém. du Museum d'Hist. Nat. Vol. X. Paris, 1823 — Ann. de Chimie, N. S. Vol. XXVI. Paris 1824. — Quarterly Journ. of Sc. Liter. and Arts. Vol. XVIII, London. 1825.*

- LAURENTIIS M. DE — *Universae Campaniae Felicis Antiquitates.*—
Neapoli, 1826, in 4°, Vol. I, pp. 7 + 288, pl., Vol. II, pp. 303, pl. 1.
- LAVINI G.—*Rime filosofiche colle sue annotazioni alle medesime.*—
Milano, 1750, in 4°, pp. XXXII + 232.
- LAVINI G. — *Analyse de la cendre du Vésuve de l'éruption 1822*
(1828). — *Mém. d. R. Acc. d. Sc. d. Torino, Vol. XXXIII.*
Torino, 1829.
- LEBERT H. — *Le Golfe de Naples et ses volcans, et les volcans*
en général. — *Lausanne, 1876, in 8°, pp. 120, pl. 1.*
- LECOUTOURIER.—*Phénomènes observés au Vésuve* (par M. Palmieri). — *Musée des Sc. Mai 1856 (?)*
- LE HON H. — *Histoire complète de la grande éruption du Vésuve*
de 1631.—*Bruxelles, par M. Hayez, 1865, in 8°. pp. 64, Map*
of lavas since 1631. Sc. 1:25000.
- LEMMO G. — *Pietosa istoria del danno accaduto nel paese detto*
Somma, non già del foco; ma di acqua, pietre, arena, e
saette, che ha spianato detto paese, con Ottajano. (Verses).—
(Napoli, 1794), in 8°. (B. N.).
- LEMMO G. — *Prodigioso miracolo del nostro gran Santone, e Di-*
fensore S. Gennaro, d'averci liberato dall'incendio del Vesuvio,
e dal terremoto nell'anno 1794. (Verses).—?, *in 8°. (B. N.).*
- LEO M. DI.—*Il Vesuvio nell' ultima eruzione dell' 8 agosto 1779.*
Canto. — *Napoli, 1779, in 8°, pp. 26. Another edition. pp.*
24, (O. V.).
- LEONE AMBROGIO DETTO NOLANO. — *La storia di Nola. (This book*
contains the oldest figure of Vesuvius. It is on this authority
that writers attribute an erupt. of Vesuvius in 1500). — *Ve-*
nezia, 1514, in fol. (O. V.).
- LEONIS A.—*Antiquatum nec non Historiarum Urbis ac Agri Nolae,*
ut et de Montibus Vesuvio, et Abella descriptionis. — *Vene-*
tiis, 1514, and Lug. Bat. In fol. pp. 4 + 92 + 10, pl. IV.
- LE PERE G. — *Deuxième recueil de divers memoires sur les Pouz-*
zolanes naturelles et artificielles. — *Paris, 1807, in 4°, pp.*
8 + 62, pl. 1.
- LE RICHE M. J.—*Antiquités des Environs de Naples et disserta-*
tions qui y sont relatives par M. J. L. R. — *Naples, 1820,*
in 8°, pp. 392 + 5.
- LIBERATORE R. — *Delle nuove ed antiche terme di Torre Annun-*
ziata e parere di V. Lanza sulle facoltà salutifere dell'acqua
termo-minerale Vesuviana Nunziante — *Annali Civile del Re-*
gno delle Due Sicilie, Vol. VI, pp. 95-109. Napoli, 1835, in
8°, pp. 56, pl. 1. (C. A.).

- LICOPOLI G. — Storia naturale delle piante che nascono sulle lave Vesuviane. — *Napoli, 1871, in 8°, fol. 2, pp. 58, pl. 3.* (C. A.).
- LIDIACO T. — Stanza a Crinatea, (L'eruzione del Vesuvio dell'anno 79, e la morte di Plinio). — ? *in 4°, p. 12.*
- LIGUORI F. S. — Cenni storico-critici della Città di Gragnano e luoghi convicini. — *Napoli, 1863. in 8°. See Chap. XI, pp. 36-37.* (B. N.).
- LIPPI C. — Dell'utilità della parte vulcanica. — 1807, *in 4°, p. 24.*
- LIPPI C. — Qualche cosa intorno ai vulcani all'occasione dell'eruzione del Vesuvio del 1° gennaio 1812. — *Napoli, 1813, in 8°, pp. 167, (O. V.)*
- LIPPI C. — Esposizione dei fatti che da novembre 1810 a febbraio 1815 han avuto luogo nell'accademia di Sci. di Napoli relativamente alla sua scoperta geologica-istorica dalla quale risulta che le due città Pompei ed Ercolano non furono distrutte e sotterrate dal Vesuvio, etc. Also Circolare Esaglotta. — *Napoli, 1816, in 4°, pp. 384+18, pl. 1.* (C. A.).
- LIPPI C. — Fu il fuoco o l'acqua che sotterrò Pompei ed Ercolano?. Scoperta geologico-istorica. — *Napoli, 1816, in 8°, fol. 2, pp. 384, fol. 2, pl. 1.* (C. A.).
- LIPPI C. — Apologia sulla pretesa Zurite. — *Napoli, 1819, in 8°, pp. 15, (C. A.).*
- LOBLEY L. J. — Mount Vesuvius; a description. Historical and Geological account of the volcano with a notice of the recent eruption, and an appendix containing letters by Pliny the younger, a table of dates of eruptions, and a list of Vesuvian minerals, — *Published by the Geologist's Association of London 1868, in 8°, pp. VI+55, pl. 3.*
- LOBLEY L. J. — Mount Vesuvius, a description. Historical and Geological account of the Volcano and its surroundings. — *London, 1889, in 8°, pp. 385, pl. 20.*
- LONGOBARDI P. — Musarum primi flosculi. See pp. 46, 90, 129 132. — *Napoli, 1714, in 4°, fol. 8, pp. 132.* (O. V.).
- LONGO G. B. — Il lagrimoso lamento del disagio che à fatto il Monte di Somma, con tutte le cose occorse fino al presente giorno. — *Napoli, 1632, in 12°, fol. 6.* (C. A.).
- LOPE FELIX DE VEGA CARPIO. — Canzone. — *See De Quinones.*
- LOPEZ DE ZARATE FRANCISCO. — Sonetto, aludendo que en la tierra del Vesuvio fue el levantamiento de los Titanos por su mucha abundancia. — *See De Quinones.*
- LOPEZ VALDERAS FERNANDO. — Sonetto. — *See De Quinones.*
- LORENZANO (DE) F. G. — Breve compendio del lamentable incendio del Monte de Somma. — *Napoli, 1632, in 8°, pp. 16.*

- LOTTI GIOVANNI (accad. errante). — L'incendio del Vesuvio in ottava rima, — *Napoli, 1632, in 12°, fol. 12.*
- LUC (DE) J. A. — Formation des Montagnes Volcaniques. Observations au Vésuve et à l'Etna. — *La Haye et Paris, 1780, in 8° pp. 19.*
- LUC (DE) J. A. — Remarks on the geological theory supported by M. Smithson in his paper on a Saline substance from mount Vesuvius. — *The Philosoph. Magaz. by Alex. Tilloch. Vol. XLIII. London 1814. — Journ. de Phys. et Chim et de l'Hist. Nat. par. J. C. de Lametherie et Ducrotay de Blainville. Vol. LXXVIII. Paris, 1814.*
- LUCA (DE) P. — Memoria sull'eruzione del 1832. — *Nuova Antologia di Firenze, 1833, Bull. d. l. Soc. géol. de France. Paris, 1833.*
- LUCA (DE) S. — Ricerche chimiche sopra talune efflorescenze vesuviane. — *Napoli, 1871.*
- LUCA (DE) S. — Sopra talune materie raccolte in una fumarola del cratere vesuviano — *Rend. d. R. Acc. d. Sc. Napoli, 1876.*
- LUCA (DE) S. — Ricerche chimiche sopra una cenere trovata negli scavi di Pompei. — *Rend. d. R. Acc. d. Sc. fis. e mat. Ann. XVII, Napoli, 1878.*
- LUCA (DE) S. — Ricerche chimiche sopra una particolare argilla trovata negli scavi di Pompei. — *Rend. R. Accad. d. Sc. Fis. Mat. Napoli, 1878, Ann. XVII.*
- LUDOVICI D. — Carmina et inscriptiones. Opus posthumum. Two parts. — *Part relating to earthquakes in Vol. I., pp. 42-46; and relating to Vesuvius pp. 46-47, 63-7, 143-145. Naples, 1746 (C. A.).*
- LYTTON B. — The Last Days of Pompeii — *In three Volumes London 1834; many subsequent editions.*
- MACKINLAY R. — Letter dated at Rome the 9th January 1761 concerning the late eruption of Mount Vesuvius etc. — *Philosoph. Transact. of the R. Soc. of London. 1761. Vol. LII. pp. 44,*
- MACRINI J. — Vindimialium ad Campaniae usum libri duo, — *Neapoli, 1716, in 4°, pp. 12 + 36.*
- MACRINO. G. — De Vesuvio, item ejusdem opuscula poetica. — *Neapoli, 1693, in 8°, fol. 16, pp. 156.*
- MADemoiselle * * * — Lettre sur l'éruption du Vésuve en Août 1756, — *In "Journal Etranger." mars 1757, pp. 159-168 (C. A.).*
- M. A. D. O. — Ausführlicher Bericht von dem letzten Ausbruche des Vesuvs, am 15ten Juni 1794, die Geschichte aller vorher-

gegangenen Ausbrüche und Betrachtungen über die Ursachen der Erdbeben; von Herrn M. A. D. O. Professor der Arzneygelahrtheit zu Neapel — Nebst einem Schreiben des Einsiedlers am Vesuv und zwey Briefen des Duca della Torre über den nämlichen Gegenstand. Als ein Anhang zu des Ritters Hamilton Bericht vom Vesuv. Aus dem Italienischen überstzt. Mit einem nach der Natur gezeichneten Kupfer. — *Dresden, 1795* (O. V.).

M. A. D. O. (ONOFRIO (D') MICHELANGELO C. A. — Relazione ragionata della eruzione del nostro Vesuvio accaduta a' 15 giugno 1794. In seguito della storia completa di tutte le eruzioni memorabili fino ad oggi, con una breve notizia della cagione dei terremoti. — *Napoli, in 8°, pp. (C. A.)*.

M. A. D. O. — Relazione ragionata della eruzione del nostro Vesuvio nel dì 15 Giugno 1794. Breve fatica del professore di medicina M. A. D. O. (Michele Arcangelo d' Onofrio). — ?, in 4°. (B. N.) See *Anonymous*.

MAFFEI G. C. — Scala naturale, ovvero fantasia dolcissima intorno alle cose occulte, e desiderate nella filosofia. — *Vinegia, 1573, in 8°, fol. 140*.

MAFFEI S. — Tre lettere (The 2nd treats of the new discovery of Herculaneum) a P. Bernardo de Rubeis. — *Verona, 1748, in 4°, (C. A.)*.

MAGALOTTI L. — Salita sul Vesuvio. — See « *Dei Vulcani o Monti Ignivomi.* » Vol. II. (See *Anonymous.*) *Livorno, 1779*.

MAIZONY DE LAUREOL. — L'Héracleade, ou Herculaneum enseveli sous la lave du Vésuve, poème de L'A. Florus, trad. en vers français avec des notes. — *Paris, 1837, in 8°, pp. XXIII + 458 (C. A.)*.

MAJONE D. — Breve descrizione della R. città di Somma Vesuviana. — *Napoli, 1793, in 4°, fol. 10, pp. 56, pl. 1, figs.*

MAJONE G. — Della esistenza del Sebeto nella pendice settentrionale del Monte di Somma. — *Napoli, 1865, in 4°, fol. 1, pp. 34, pl. 1, map. 1 (C. A.)*.

MAJO. — Trattato delle acque acidule che sono nella città di Castellammare di Stabia. — *Napoli, 1754*.

MALLET R. — Determination of Volcanic Temperatures. — *London, Sept. 29th 1862, in folio, pp. 2*.

MALLET R. — The Great Neapolitan Earthquake of 1857. — *London, 1862, II Vols, in 8°. Numerous figures and plates.*

MALLET R. — Preliminary Report on the Experimental Determination of the Temperatures of Volcanic Foci, and of the Temperature, state of Saturation, and Velocity of the issuing

- gases and vapours. — *Reports. Brit. Assoc. 1863, in 8°, p. 1 (with an autograph letter of Mallet. (C. A.).*
- MALLET R. — The eruption of Vesuvius in 1872, by Prof. Luigi Palmieri. Notes and an introductory sketch of the present state of knowledge of terrestrial vulcanicity, the cosmical nature and relations of Volcanoes and Earthquakes. — *London, 1873, pp. 148, in 8°, pl. 8. (C. A.)*
- MALLET R. — On some of the conditions influencing the projection of discrete solid materials from Volcanoes and on the mode in which Pompeii was overwhelmed. — *Journ. of the R. Geol. Soc. of Ireland. Vol. IV. Part III. Dublin, 1876, in 8°, pp. 144-169.*
- MALLET R. — On the mechanism of production of volcanic dykes, and on those of monte Somma. — *The Philos. Magaz. Vol. XII. London, 1876. Quarterly Journ. of the Geol. Soc. Vol. XXXII. London, 1876.*
- MALPICA C. — La notte del 3 Gennaio in cima del Vesuvio. — *Poliorama Pittresco. N. 23, pp. 181-183; 19, Gennaio, 1839, with figs.*
- MANFREDI A. — 1632. — See BARONIO.
- MANNI P. — Saggio fisico-chimico della cagione de' baleni e della pioggia che osservasi nelle grandi eruzioni vulcaniche. In occasione dell' eruzione del Vesuvio del Giugno 1794. — *Napoli, 1795, in 8° pp. 16. See Santoli V. Narrazione de' fenomeni, etc.*
- MANTOVANI P. — Un' escursione al Vesuvio durante l'eruzione del Gennaio 1871. — *Boll. Naut. Geogr. Vol. V. Roma, 1871.*
- MANTOVANI P. — La pioggia di cenere caduta a Napoli e la lava del Vesuvio dell' Aprile 1872. — *Boll. Naut. Geogr. Vol. VI. Roma, 1872.*
- MANZO G. B. (Marchese di Villa). — Lettera in materia del Vesuvio (Erupt. 1631) scritta da Napoli al sig. Antonio Bruni a Roma. — *M. S. in library of the Faculty of Medecine of Montpellier. See also Riccio L. (C. A.).*
- MARANA. — Des Montagnes de Sicile et de Naples, qui jettent des feux continuels : de la nature de leurs effets. — *Lettre XLIII, de l' Espion Turc. t. I. pp. 153-157 (C. A.).*
- MARAVIGNA C. — Esame di alcune opinioni del sig. N. Boubée contenute nelle sue opere intitolate « Géologie populaire et Tableau de l'état du globe à ses différens âges » — *4th édit. 1834, in 4°, pp. 48.*
- MARENA THOM. ANTONIUS. — Brevissimum terraemotuum examen, etc. — *Neapoli, 1632. in 4°. fol. 10, (C. A.).*

- MARI C. — Il Vesuvio. — Canto — *Napoli*, in 16°, pp. 16. (C. A.).
- MARIGNAC (DE) C. — Notices minéralogiques. (Epidote, Humite ou Chondrodite du Vésuve, Pinite, Gigantolite). — *Supplément à la Biblioth. Univ. et Revue Suisse*. 2.^e Sér. Vol. IV. Genève, 1847. *Journ. de Pharm. et des Sc. accessoires*. 2.^e Sér. Vol. XII. Paris, 1847.
- MARTINIO (DE) C. — Osservazioni giornaliere del successo del Vesuvio dalli 16 Dic. 1631 fino alli 10 Aprile 1632. — *Napoli*, 1632, in 4°, pp. 32. (B. N.).
- MARTINO DI CARLES FLAMINIO. — Ottave sopra l'incendio del Monte Vesuvio, — *Napoli*, 1632, in 12.° fol. 12. (B. N.).
- MARTINO (DE) L. M. — Eruzione del Vesuvio 29 (79) dell'Era cristiana. (Signed M. P.). — *Melphis excidium*. pp. 209-213.
- MARTINOZZI V. — Sonetto. — See *Giorgi Urbani*,
- MARTORELLI J. — De Regia Theca Calamaria. — *Neapoli*, 1756. Vols. 2, in 4°, fig. Vol. I, pp. 8, fol. 290; Vol. II, pp. 8 and from 291-738 (*Vesuvius* pp. 417 and foll, and 566).
- MASCOLI I. B. — De incendio Vesuvii excitato XVII Kal. Januar. An. 1631. Libri X, cum chronologia superiorum incendiorum et ephemeride ultimi. — *Neapoli*, 1633, in 4°, fol. 4, pp. 312 + 37, fol. 5, pl. 2.
- MASINO D. M. A. — Distinta relatione dell'incendio del sevo Vesuvio alli 16 Dic. 1631 successo etc. — *Napoli*, 1632, in 4°, pp. 36. (C. A.).
- MASSARI J. P. — Sirenis lachrymae effusae in Montis Vesevi incendio. — *Neapoli*, 1632, in 4°, pp. 28. (C. A.).
- MASTRIANI. — L'eruzione del Vesuvio del 26 Aprile 1872. — *Napoli*, 1872, in 8°, pp. 102, col. pl. 1, map. 1.
- MASTROJANNI D. G. — L'incendio del Vesuvio di Maggio e l'accensione dell'aria di decembre, del caduto anno, etc. — *Napoli*, 1738, in 4°.
- MAUGET A. — Lettres à M. S.-C. Deville sur l'éruption du Vésuve du 27 Mai 1858. — *Bull. d. l. Soc. Géol. de France*. Vol. XV. Paris, 1858. *Compt. Rend. Hebdom. des Séanc. d. l'Acad. d. Sc. Paris*, Vol. XLVI. p. 1098, Mai et Juin 1858.
- MAUGET. A. — Sur les phénomènes consécutifs de la dernière éruption du Vésuve. — *Compt. Rend. hebdom. des Séanc. d. l'Acad. d. Sc. Paris*, Vol. LVI. pp. 926-928. 1862.
- MAUGET A. — Sur les phénomènes consécutifs de l'éruption de décembre 1861 au Vésuve. — *Compt. Rend. Acad. Sc. Paris*. t. LXIII, pp. 7-8, 1866.
- MAUGET A. — Faits pour servir à l'histoire éruptive du Vésuve. Récit d'une excursion au sommet du Vésuve le 11 Juin 1867.—

- Compt. Rend. d. l' Acad. des Sc. Vol. LXVI, pp. 163-166. Paris, 1868.*
- MAURI A. — Memoria sulla eruzione vesuviana de' 21 Ottobre 1822.—*Napoli, 1823, in 8°, fol. 6. pp. 22. pl. 1, figs. (C. A.).*
- MAURINI G. — De Vesuvio — *Neapoli, 1693, in 8°, pp. 156.*
- MAYORICA. — L'incendio di Vesuvio successo nell'anno del Signor 1631. a 16 xbre. — *M. S. in the S. Martino Library, Naples. Copy pp. 99 (C. A.).*
- MAZZEI D. — Sonetti due. — *See G. Urbano.*
- MAZELLA S. — Descrizione di Napoli. — *Napoli, 1586.*
- MAZUCHI A. S. — In vetus marmoreum Sanctae Neapolitanae ecclesiae Kalendarium Commentamus — *Napoli, 1744. Diatriba V. De Vesuvianis incendiis ceterarumque vulcaniarum flammarum origine, ex antiquorum christianorum sententia ex chronographo Gerasimo Monacho, pp. 392-402—Vol. III., pp. XL+1096; fol. I, pl. 3. (C. A.).*
- MECATTI G. M. — Racconto storico filosofico del Vesuvio e particolarmente dell' eruzione principiata a' 25 Ottobre 1751 e cessata a' 25 Febbraio 1752. — *Napoli, 1752, in 4°, fol. 4, pp. 460+244 pl. 10. (Most copies differ and are incomplete). (C. A.).*
- MECATTI G. M. F. — Esame o sia confronto di ragioni adottate dall'autore delle novelle letterarie di Firenze Dr. Gio. Lami di Santacroce, e dall'Ab. Giuseppe M. Mecatti sopra la pretesa Città di Pompei, e di Ercolano: sopra la Rettina, o sia Resina di cui parla Plinio: e sopra le scavazioni, che presentemente si fanno alla Real Villa di Portici di S. M. Siciliana, estratte tutte da alcune lettere de' medesimi, — *Napoli, 1752. in 4° p. 7-88.*
- MECATTI G. M. — Descrizione della lava scorsa nel mese di Luglio dell' anno 1754 nel cratere ossia piattaforma del Vesuvio ed eruttata dalla cima di una montagnola. — *Napoli, 1754.*
- MECATTI G. M. — Discorsi storici filosofici sopra il Vesuvio. — *Napoli, 1754, in 4°, pp. 290.*
- MECATTI G. M. — Osservazioni che si son fatte sopra il Vesuvio dal Marzo 1752 al Luglio 1754, etc. — *Napoli, 1754, in 4°, pp. 7+298+1, pl. 1. (At the end of a copy in (O. V.). there is a view of erupt. of Vesuvius of 1767). Several other editions.*
- MECATTI G. M. — Continuazione delle osservazioni sopra diverse eruzioni del Vesuvio. — *Napoli, 1761, in 4°, fol. 4°, pp. 298, pl. 2. (C. A.).*
- MECATTI G. M. — Osservazioni che si sono fatte nel Vesuvio dal

- mese di Agosto 1752 sino alla narrazione istorica di quel che è occorso al Vesuvio nella eruzione cominciata la notte del dì fra i dieci e gli undici d'aprile dell'anno 1766. — *Napoli?*, fol. 4, pp. 298, pl. 6. (C. A.).
- MECATTI G. M. — Narrazioni storiche di quel che occorre alla rottura del Vesuvio dal dì 3 Dic. 1754 fino a quanto è posteriormente avvenuto. — *Napoli*, 1776. (*)
- MEISTERS. — Beobachtungen über den Vesuv. — *Mag. der Wissenschaft. und der Litt. Bd. II, Göttingen*, 1781, in 12°, pp. 25, pl. 1.
- MELCHIORRE D. — 3.^a lettera. Raccolta di monumenti sopra l'eruzione del Vesuvio seguita nell'agosto 1779. — *Giornale delle Arti e del Commercio*, Vol. I, Macerata, 1780, in 8°. at pp. 141 and following. (O. V.).
- MELE F. — De conflagratione Vessevi, Poema. — *Neapoli*, 1632, in 12°, fol. 10. (C. A.).
- MELLONI ET PIRIA. — Recherches sur les fumaroles. Lettre de M. Melloni à M. Arago. — *Compt. Rend., Acad. Sc. t. XI, Paris*, 1840, pp. 352-356, (C. A.).
- MENARD DE LA GROYE F. J. B. — Observations avec réflexions sur l'état et les phénomènes du Vésuve pendant une partie des années 1813-14. — *Journ. de Phys. de Chim. et de l'Hist. Nat. Vol. LXXX et LXXXI. Paris*, 1815. *Soc. Roy. Trans. Le Mans. 1820 (?) « Courcier »*, 1815, in 4°, fol. 2, pp. 98+4. (C. A.).
- MERULA G. — See *Dion Cassius*. (C. A.).
- MÈRY M. — Les amans du Vésuve. — *Paris* 1856, in 12, p. 95.
- MESCHINELLI L. — La flora dei tufi del Monte Somma. — *Rend. R. Accad. d. l. Sc. Fis. Mat. Napoli*, 1890. pp. 8.
- MESSINA N. M. — Relatione dell'incendio del Monte Vesuvio dell'anno 1682. — *Napoli*, 1682, in 4°. fol. 2. (C. A.).
- METHERIE (DE LA) J. C. — Note sur quelques cristaux de Ceylante trouvés parmi les substances rejetées par le Vésuve. — *Journ. de Phys. de Chim. et de l'Hist. Nat. Vol. LI. Paris*, 1800.
- METHERIE (DE LA) J. C. — Observations sur les dernières éruptions du Vésuve, — *Journ. de Phys. de Chim. et de l'Hist. Nat. Vol. LXI, Paris*, 1805.

(*) All these works of Mecatti are much the same, with additional accounts of new eruptions, and rarely two copies are alike.

- MEUNIER S. — Fer natif trouvé au Vésuve. — *Le Naturaliste*, 10^{me} ann. Paris, 1888. pp. 89-91, fig. 1..
- MIERISCH BR. — Die Auswurfsblöcke des Monte Somma. — (*Tschermak, Mineral. und petrogr. Mittheilungen. B. VIII.*) Wien. 1887, pp. 78, figs.
- MILANO N. P. — Vera relazione del crudele, misero e lagrimoso prodigio successo nel Monte Vesuvio, etc. — *Napoli*, 1632, in 4°, pp. 8. (C. A.).
- MILENSIO F. — Vesevus. Carmen. — *Napoli*, 1595, in 4°, fol. 6. N. B. Is in appendix to authors work entitled "Dell'impresa dell'Elefante" (C. A.)
- MILESIO G. — Vera relazione del miserabile e memorando caso successo nella falda della nominatissima montagna di Somma. — *Napoli*, 1631, in 4°, pp. 8.
- MILESIO G. — La seconda parte degli avvisi di tutto quanto è successo in tutta la seconda settimana (Vesuvio). — *Napoli*, 1632, in 4°, pp. 8.
- MILESIO DA PONTA GIACOMO. — Warhaffte Relation erbaermlichen und erschroecklichen Zustands, so sich in der Seyten desz weitberumbten Bergs Vesuuii. — *München*, 1632, in 4°, pp. 19. See pp. 10-19.
- MILESIUS LE R. P. J. — Récit véritable du misérable et mémorable accident arrivé en la descente de la très-renommée Montagne de Somma, autrement le Vésuve, environ trois lieues loing de la ville de Naples. Depuis le lundy 15 Décembre 1631, sur les 9 heures du soir, jusques au Mardy suivant 23 du mesme; décrit jour par jour et heure. — *Lyon*, 1632, in 8°, pp. 13. (C. A.).
- MILO (DE) D. A. — All' Ill.^{ma} Sig.^a Maria Selvaggia Borghini, ragguagliandola del Monte Vesuvio e dei suoi incendi. — *Bulifon. Letter. Memor. Vol. III, (?)*
- MINERVINO S. C. — Lettera sopra la ultima eruzione del Vesuvio dell'anno 1779. Dans l'ouvrage. « Dei vulcani o monti ignivomi. » — (*See Anonymous*).
- MINERVINO D. C. S. — Altra lettera sopra l'eruzione dell'anno 1779. — *Ibid.*
- MINERVINO S. C. — Due lettere sull'eruzione del 1794. — *Giorn. Lett. di Napoli. Vol II. 1794, in 8°, pp. 86-97.*
- MINTO (EARL OF). — Notice of the barometrical measurements of Vesuvius, and the new cone which was formed in the eruption of February 1822. — *The Edinb. Journ. of Sc. Vol. VIII. Edinburgh, 1827.*

- MIOLA A. -- Ricordi Vesuviani, Carmeu pel centenario di Pompei. — *Napoli, 1879, in 4°, pp. 7.* (C. A.).
- MIRANDA D. DE AND PACI G. M. — Osservazioni di Meteorologia elettrica sulle vulcaniche esalazioni. — *Napoli, 1845. in 4°, pp. 14.* (C. A.).
- MISCELLANEA POETICA (M. S.)—"Parthenope terraemotu vexata".—
fol. 6. "*Vesuvius morum magister*." fol. 3 "*De Vesuvio semper ignum ejactante*" fol. 1. "*Fontis descriptio: ubi Vulcani statica diaculantis.*" fol. I. (C. A.).
- MISSON M. — Voyage d'Italie. Edition augmentée de remarques nouvelles et interessantes.—*Amsterdam, 1743, 4 Vols. in 12°, Vol. I. fol. XLVIII, pp. 352, pl. 10., Vol. II. pp. 366, pl. 37., Vol. III, pp. 290, pl. 9., Vol IV, pp. 295, pl. 2* (C. A.).
- MITROWSKY (VON) I. G. — Physikalische Briefe ueber den Vesuv und die Gegend von Neapel.—*Leipzig, 1785, in 8° pp. 142.*
- MITSCHERLICH E. — 1851-1852. — *Rose G.*
- MITSCHERLICH R. — Ueber eine Vesuvianschlacke. — *Zeitschr. d. Deut. Geol. Gesell. Bd. XV. Berlin, 1863.*
- MOCCIA P. — Ad Andream Fontanam de Vesuviano Incendio anno 1706 — *Epistola.* (?)
- MODESTO P. — All'Eccellentissimo D. Francesco Conte Esterhazy (Concerning the controversy about the presence of metallic iron in Vesuvian Sand between D. Tata f. F. Viscardi) — *Napoli, 1795, in 4°, pp. 26.* (O. V.).
- MOLES F. — Relacion tragica del Vesuvio. — *Napoles, 1632, in 8°, pp. 68.*
- MONACO V. DI. — Lettera analitica sull'acqua della Torre del Greco, comunemente creduta prodigiosa al Sig. Ant. Sementini, etc. (Dated Aug. 4th 1789. — *Napoli, ? in 12°.* (B. N.).
- MONACO. — Eruption du Vésuve en 1754. — *A plate.* (C. A.).
- MONFORTI F. A. — Ad divum Januarium, elogium. — *See G. Urbano.*
- MONGES G. — Sulla terribile eruzione del Vesuvio accaduta ai 17 Giugno 1794. — Lettera responsiva a N. N. Dated from — *Salerno, 1794, pp. 24.*
- MONITIO C. — La Talia dove si contiene la Fiasca con le lagrime del Vesbo furioso. — *Napoli, 1647, in 8°, pp. 200.* (O. V.).
Another copy of the "Fiasca" only, at the end of which is a leaf not numbered in the work with a view of Vesuvius and some lines of verse. pp. 74, fol. 1. (O. V.).
- M. J. L. R. — See Le Riche M. J.
- MONITIO C. — La Talia, dove si contiene la Fiasca sotto sensati scherzi di vario stile. Con le eroiche lagrime del Vesbo furioso, e un assaggio del volume maggiore intitolato Crumena Sapientis. — *Napoli, in 8°, 1645, pp. 208. fol. 1,* (C. A.).

- MONNIER M. — Le Vésuve et les tremblements de terre. — *L' Illustration*. Paris, Janvier, 1858.
- MONNIER M. — Promenade aux environs de Naples (Eruption du Vésuve, destruction de Torre del Greco). — “ *Le Tour du Monde* ” N. 124, 3^{me} année, 1864. pp. 305-319, with illust. (C. A.).
- MONTEFERRANTE R. — See Kernot.
- MONTEIRO I. A. — Mémoire sur la chaux fluatée du Vésuve. — *Annales du Muséum d'Hist. Nat.* Vol. XLIX. Paris, 1812, pp. 171-188. — *Journ. des Mines*. Vol. XXXII. Paris, 1812.
- MONTMONT A. — Des volcans en général et plus spécialement du Vésuve et de l'Etna. — *Bull. d. l. Soc. de Géog. Paris*, Sept. 1841, pp. 137-158.
- MONTICELLI T. — Descrizione delle eruzioni del Vesuvio nel 1813. — *Giornale Enciclopédico*, in 8°, pp. 47.
- MONTICELLI T. — Descrizione dell'eruzione del Vesuvio avvenuta nei giorni 25 e 26 Dicembre 1813. — *Napoli*, 1815, in 4°, pp. 47. 2nd edit. ? (Napoli 1842), in 4° pp. 40. (O. V.).
- MONTICELLI T. — Lettre sur la découverte de la Wollastonite dans le Vésuve par M. le Prof. Gismondi. — *Bibl. Univ. de Genève*. Vol. II. Genève, 1817.
- MONTICELLI T. — Rapporto nell'eruzione di dicembre 1817. — *Giornale Enciclopédico*, Napoli, Marzo 1818, in 8°, pp. 7.
- MONTICELLI T. — Report on the eruption of Vesuvius in Decemb. 1817. — *The J. of Sc. and the Arts*. Vol. V. London, 1818.
- MONTICELLI T. — Altre escursioni fatte nel Vesuvio dal 1817 al 1820. — ?.
- MONTICELLI T. — Notizie di un'escursione al Vesuvio e dell'avvenimento che vi ebbe luogo nel 16 Genn. 1821 in cui il Francese Coutrel si precipitò in una di quelle nuove bocche. — *Atti d. Acc. d. Sc. e Lett*, Napoli, 1821, pp. 9. (O. V.).
- MONTICELLI T. — Collections des substances volcaniques. — ?, 1825, in 8°, pp. 16. (O. V.).
- MONTICELLI T. — Memoria sulle sostanze vulcaniche rinvenute nella lava di Pollena discoperta dalle ultime alluvioni del Vesuvio. — *Atti d. R. Acc. di Sc. e Lett*. Vol. II, pt. 1. Napoli, 1825, pp. 77-86.
- MONTICELLI T. — Memorie sulle vicende del Vesuvio nell'anno 1827. — *Atti d. R. Sc. e Lett*. Napoli, 1828, pp. 90-125.
- MONTICELLI T. — Memoria sull'origine delle acque del Sebeto di Napoli antica, di Pozzuoli etc. — *Atti d. Acc. d. Sc. di Napoli*, 1828, pp. 56, pl. 2. (C. A.).

- MONTICELLI T. — Osservazioni dello stato del Vesuvio dal 1823 al 1829. — « *Opere* » Vol. II, pp. 106-112.
- MONTICELLI T. — Lettera sullo stato del Vesuvio nel prossimo passato mese di marzo. — *Ateneo, Giornale di Scienze, Letteratura, Arti ed Industria*, Vol. I, Napoli, 1831, in 8°, p. 84-87. (C. A.).
- MONTICELLI T. — Memoria sopra talune nuove sostanze Vesuviane. — *Atti d. Acc. d. Sc. di Napoli*, 1832, Vol. V, pt. 2, pp. 157-159. (C. A.).
- MONTICELLI T. — Saggi analitici sopra alcuni prodotti Vesuviani. — *Atti d. Acc. di Sc. di Napoli*, 1832 pp. 6. (C. A.).
- MONTICELLI T. — Analisi chimica di un prodotto vesuviano. Rapporto di G. Guarini. — *Rendic. d. Acc. d. Sc. di Napoli*, 1833, pp. 161-163. (C. A.).
- MONTICELLI T. — Sulle origini delle acque del Sebeto di Napoli etc. (1828). — *Atti d. R. Istit. d'Incor. alle Sc. Nat. ed Econ. di Napoli*, Vol. V. 1834.
- MONTICELLI T. — Ausbrüche des Vesuv's seit April 1835. — *Neues Jahrb. für Miner. Geogn. Geol. etc. Bd. III, Stuttgart*, 1835.
- MONTICELLI T. — Memoria sopra altre vicende del Vesuvio del 1835. — *Atti d. Acc. d. Sc. di Napoli*, 1835. Vol. V, pt. 2, pp. 183-186.
- MONTICELLI T. — Memoria sopra i danni che il fumo del Vesuvio reca ai vegetabili — *Atti. d. Acc. d. Sc. di Napoli*, 1835, — Vol. V, pt. 2^a, pp. 186 — 189. (C. A.).
- MONTICELLI T. — Memorie sul Vesuvio. — *Atti d. R. Acc. di Sc. e Lett. Vol. IV. Napoli*, 1839.
- MONTICELLI T. — Rapporto del Segretario perpetuo della R. Accad. d. Sc. sulla eruzione del Vesuvio del dì 22 a 26 Dic 1817 letto nella tornata de' 9 marzo 1818. — *Napoli*, 1841, in 4°, pp. 15. (C. A.).
- MONTICELLI T. — Monografia del ferro di Cancarone. — *Atti d. R. Accad. d. Sc. di Napoli*, 1841, Vol. V. pt. 2^a, pp. 217 227, pt. 3. (C. A.).
- MONTICELLI T. — Opere. — *Napoli*, 1841-43, in 4°, 3 Vols. Vol. I, fol. 4, pp. 295, pt. 2, Vol. II, pp. 335, pt. 7, Vol. III, pp. 432, pt. 19, map. 1.
- MONTICELLI T. — Genesi del ferro di Cancarone. — *Atti d. R. Accad. d. Sc. di Napoli*, 1842, Vol. V, pt. 2^a, pp. 229-232. (C. A.).
- MONTICELLI T. — Memoria sulla eruzione del 28 Luglio (1833). — *Atti d. R. Acc. di Sc. e Lett. Vol. V, part. 2.^a Napoli*, 1843, pp. 169-177.

- MONTICELLI T. — Introduzione alla monografia delle Pelurie lapidee del Vesuvio. — *Atti d. R. Acc. d. Sc. Napoli, 1843, Vol. V. Parte 2^a, pp. 191-194.*
- MONTICELLI T. — Monografia delle Pelurie lapidee del Vesuvio (1837). — *Atti d. R. Acc. di Sc. e Lett. Vol. V. parte 2.^a Napoli 1843, pp. 195-205.*
- MONTICELLI T. — Muriato ammoniacale eruttato dal Vesuvio (1834). — *Atti d. R. Acc. d. Sc. e Lett. Vol. V. parte 2.^o Napoli, 1843, 179-181.*
- MONTICELLI T. — Sopra alcuni prodotti del Vesuvio (1832). — *Atti di R. Acc. di Sc. e Lett. Vol. V. pt. 2.^a Napoli, 1843.*
- MONTICELLI T. — Sopra alcune vicende del Vesuvio del 1805. — *Atti d. R. Acc. di Sc. e Lett. Vol. V. pt. 2.^a Napoli, 1843.*
- MONTICELLI T. — Sopra talune sostanze vesuviane (1832). — *Atti d. R. Acc. di Sc. e Lett. Vol. V, pt. 2.^a, Napoli, 1843.*
- MONTICELLI T. — Sulle sublimazioni del Vesuvio (1832). — *Atti d. R. Acc. di Sc. e Lett. Vol. V, Pt. 2.^a, Napoli, 1843, pp. 147-149, pl. 1.*
- MONTICELLI T. — Storia e giacitura del ferro di Cancarone. — *Atti d. Acc. d. Sc. di Napoli, Vol. V, pt. 2, 1843, pp. 214-215, (C. A.).*
- MONTICELLI T. — Memorie sopra alcuni prodotti del Vesuvio e alcune vicende di esso. — *Atti d. R. Acc. di Sc. e Lett. Vol. V, pt. 2^o, Napoli, 1844, pp. 141-145.*
- MONTICELLI T. — Continuazione alla monografia delle Pelurie lapidee del Vesuvio. — *Atti d. R. Acad. d. Sc. Napoli, 1843, Vol. V, Parte 2^a, pp. 287-218, pl. I.*
- MONTICELLI T. AND COVELLI N. — Osservazioni ed esperienze fatte al Vesuvio in una parte degli anni 1821 e 1822. — *Giorn. Arcad. di Sc. ecc. Vol. XVI. Roma, 1822. — (In French). Naples, 1822, in 8^o, pp. 66.*
- MONTICELLI T. E COVELLI N. — Storia dei fenomeni del Vesuvio avvenuti negli anni 1821-22 e parte del 23 con osservazioni e sperimenti. — *Giorn. Arcad. d. Sc. etc. Vol. XX. Roma, 1823. Napoli, 1823, in 8^o, pp. XLIX+208+7, pl. 4. In German trans. by Dr. Noggerath and Dr. Pauls. Elberfeld, 1824, in 8^o, pp. 30+234, fol. 1, pl. 6. (C. A.). 2nd Ital. edit.. Napoli, 1842, in 4^o, pp. 170, fol. 3, pl. 2. (O. V.).*
- MONTICELLI T. AND COVELLI N. — Appendici al Prodromo della Mineralogia Vesuviana. — *Napoli, 1839, in 8^o, pp. 28. (C. A.).*
- MONTICELLI T. AND COVELLI N. — Atlante della Mineralogia vesuviana. — *Pl. 19, in 8^o, (C. A.).*
- MONTICELLI T. E COVELLI N. — Prodromo della mineralogia ve-

- suviana. Oritognosia. — *Napoli. 1825, in 8°, pp. 34+483, pl. 19. 2nd edit. 1843.*
- MONTICELLI T. E COVELLI N. — Descrizione dei prodotti mineralogici del Vesuvio. — (?)
- MONTICELLI T. E COVELLI N. — Nuove specie minerali del Vesuvio. — (?)
- MONTICELLI T. E RICCIARDI FR. — Qual sia l'influenza del Vesuvio, colle sue varie eruttazioni, sulle meteore, e sulla vegetazione del Circondario. — *Programmi due per la Real Accademie delle Scienze. Napoli, 1810, in 4°, pp. 4.*
- MORGAN O. — On some phenomena of Vesuvius. — (?)
- MORI F. — Ricordi di alcuni rimarchevoli oggetti di curiosità e di belle arti di Napoli (Erupt. 1822). — *Napoli, 1837, in 8°, fol. 31, pl. 23, figs. (O. V.).*
- MORMILE G. — Nuovo discorso intorno all'Antichità di Napoli, e di Pozzuolo. — *Napoli, 1629, in 8°, p. 69. (pp. 31-32 Vesuvius).*
- MORMILE G. (Napolitanò). — L'incendio del Monte Vesuvio e delle straggi, e rovine, che hà fatto ne' tempi antichi, e moderni insino a' 3 di marzo 1632. — *Napoli, 1632, in 8°, pp. 48, N. B. At page 47 there is a "Nota di tutte le relazioni stampati fino ad hoggi del Vesuvio raccolte da Vincenzo Bove", containing 56 entries and is the earliest bibliographical list of Vesuvian literature. (C. A.).*
- MORMILE G. — Descrizione della Città di Napoli e del suo amenissimo distretto, etc. — *Napoli, 1670, in 8°, fol. 4, pp. 264, figs. (O. V.). Other editions in 1617, and 1625.*
- MUNTERUS M. T. L. — Parerga historico-philologica. — *Göttinga, 1749. (O. V.).*
- MURATORI L. A. — Rerum Italicarum Scriptores, etc. — *Mediolani, 1723-51. Vols. 28, in fol. (Vesuvii descriptio, Vol. I, parte I, p. 278.).*
- NAPOLI R. — Nota sopra alcuni prodotti minerali del Vesuvio. — (?)
- NAPOLI R. — Sulla produzione del sale ammaoniaco nelle fumarole vesuviane. — (?)
- NAUDÉ G. — Sur les divers incendies du mont Vésuve et particulièrement sur le dernier qui commença le 16 Décembre 1631. — *Paris, 1632, in 12°, pp. 37.*
- NAUDÉ G. UND GIULIANI G. B. — Ueber den Vesuv und Aetna. — (?) 1632.
- NECKER L. A. — Ueber den Monte Somma. — *Elberfeld, 1825, in 8°, pp. 10+264, pl. 3, figs. (O. V.). Mem. Soc. Phys. et d'Hist. Nat. de Genève. t. II. 1823, pp. 155-203, pl 2, also in French. (C. A.).*

NECKER — 1825. — *V. Raffles.*

NEGRONI O. — Sulle ceneri vesuviane del 1779. — (?)

NESTEMAN UND FELBER. — Notizen über den Vesuv im Mai 1830 —
Archiv. für Mineral. Geogn. Bergbau, und Hüttenkunde.
Bd. IV. Berlin, 1831.

NETTI F. — Il Vesuvio. — *Article in the journal: L' Illustrazione*
Italiane. 19-26 dic. 1875, and 2, 9, 16, and 23 Gen. 1876.
with figs. (C. A.).

NICOLAI A. — De Vesvo Monte, epigramma. — *See G. Urbano.*

NICOLINI A. — Tavola Metrica-cronologica delle varie altezze tracciate dalla Superficie del mare fra la Costa di Amalfi ed il Promontorio di Gaeta nel corso di diciannove secoli. — *Napoli, 1839, in 4°, pp. 52.*

NICCOLINI A. — Descrizione della Gran-Terme Puteolana, volgarmente detta Tempio di Serapide. — *Napoli, 1846, in 4°, pp. 95, numerous col. and uncol. pl., maps, etc.*

NIGLIO M. — Saggio di Poesia (sul Vesuvio, pp. 70-74) — *Napoli, 1825, in 8° pp. 120. (C. A.).*

N. N. — Lettera scritta dal Sig. N. N. al sig. N. N. in Calabria sulle cagioni delle tante mosse e minacce fatte dagli edificj di Napoli nella fine del prossimo scorso anno 1766, e nel principio del corrente. — *Napoli, 1767, in 4°, pp. 16. (B. N.).*

NOBILI (DE) G. — Analisi chimica ragionata del lapillo eruttato dal Vesuvio nel dì 22 Ottobre 1822, etc. — *Napoli, in 8° pp. 20.*

NOCERINO N. — La Real Villa di Portici illustrata. — *Napoli, 1787, in 8° pp. 157+3.*

NOTO S. — Cenno storico della Cappella di S. Maria della Bruna in Torre del Greco. — *Napoli, 1851, in 12, pp. 36. (erupt. 1631).*

NUNZIANTE LE MARQUIS. — Eau vésuvienne — ? *in fol, pp. 2. (C. A.).*

NUNZIANTE (Marchese Vito) — Dimanda di privativa per la fabbricazione di Lastre e Cristalli, facendo uso per essa delle lave vulcaniche, ecc. — *Napoli, 1826, in 4°, pp. 8.*

NUZZO MAURO A. — Un Papiro, ossia i gladiatori nella Caverna del Vesuvio. — *Venezia, 1826, in 8°, p. 197.*

OESTERLAND C. & WAGNER P. — Analyses des Cendres du Vésuve — *Deutsche Chemische Gesell. 1873. — Bull. d. l. Soc. Chim. de Paris. Oct. 1873.*

OLEARIUS T. — Feuer flammen des Vesuvii. — *Hall, 1650.*

OLIVA N. M. — Lettera scritta all'abbate Flavio Ruffo nella quale si dà vera e minuta relazione degli segni, terremoti ed incendi del Monte Vesuvio, cominciando dal dì 16 del mese

- Dicembre 1631, per in sino alli 5 Gennaio 1632. — *Napoli, 1632, in 4.º fol. 4.*
- OLIVA N. M. — La ristampata lettera con aggiunta di molte cose notabili, nella quale dà vera e minuta relatione delli segni, etc. — *Napoli, 1632, in 4.º, pp. 8.* (C. A.).
- OLIVIERI G. M. — Breve descrizione istorico-fisica dell' eruzione del Vesuvio del 15 Giugno 1794. — *Napoli, 1794, in 4.º, pp. 22.*
- OLTMANS J. — Darstellung der Resultate welche sich aus den am Vesuv von A. von Humboldt und anderen Beobachtern angestellten Höhenmessungen ableiten lassen. — *Abhandl. d. könig. Akad. der Wiss. zu Berlin. Berlin, 1822-23.*
- ONOFRII P. DEGLI. — Elogii storici di alcuni servi di Dio, che vissero in questi ultimi tempi e si adoperarono pel bene spirituale e temporale della città di Napoli. — *Napoli, 1803, in 8.º, pp. XVI+172.* (*In the life of P. Gregoris M.^a Rocco from pp. 432-461 some Vesuvian eruptions are described, particularly those of 1794 and 1799.* (C. A.) and (O. V.).
- ONOFRIO (D') M. A. — Nuove riflessioni sul Vesuvio, con un breve dettaglio de' paraterremoti, etc. — *Napoli, 1794, in 12.º, pp. 20.* 2^a edit. *Nap. 1794, in 8.º, pp. 16, pl. 1, figs.* (O. V.).
- ONOFRIO (D') M. A. — Relazione ragionata dell' eruzione del nostro Vesuvio nel dì 15 Giugno 1794. — *Napoli, 1794, in 4.º fol. 1, pp. 9.* *Dresden, 1795, in 8.º, pp. 88, fol. 1, pl. 1, and several other editions.*
- ONOFRIO (D') M. A. — Lettera ad un amico in Provincia sul tremuoto accaduto ai 26 di Luglio e seguito dalla eruzione Vesuviana dell'Agosto 1805, etc. — *Napoli, 1805, in 8.º, pp. 44.* (O. V.).
- OPITZ M. — Vesuvius, Gedichte (1631). — *Frankfurt am Mayn 1746, in 8.º, pp. 19-44, Vol. I.* (C. A.).
- ORBESAN (D') M. — Description du mont Vésuve, compita relazione di quanto e succeduto insino hoggi (24 Dic.) — (?)
- ORIMINI P. — Nell'eruttazione della Montagna di Somma del 1767. (p. 158-163) from: *Degli antichi signori del Gaudio. Poesie.* — *Napoli, 1774, in 4.º, pp. 174.*
- ORIMINI P. — Poesie. — *Napoli, 1774, in 8.º, fol. 1, pp. 174.* (O. V.).
- ORLANDI G. — Dell'incendio del monte di Somma. — *Napoli, 1631, in 4.º, pp. 15.*
- ORLANDI G. — La cinquantesima e bellissima relatione del Monte Vesuvio in stile accademico. — *Napoli, 1632, in 8.º, pp. 12, fig. 2.* (C. A.).
- ORLANDI G. — Nuova e compita relatione del spaventevole incendio del Monte di Somma, detto il Vesuvio. Dove s' intende

- minutamente tutto quello che è successo fin'al presente giorno. Con la nota di quante volte detto Monte si sia abbrugiato. Aggiuntovi un rimedio denotissimo contro il terremoto. — *Napoli, 1632, in 4°, figs, pp. 16.* (C. A.).
- ORLANDI P. P. — Tra le Belle la Bellissima, esquisita, et entiera e desiderata Relazione dell'incendio del monte Vesuvio detto di Somma. — *Napoli, 1632, in 4°, fol. 4.*
- ORLANDI S. — La tregua senza fede del Vesuvio. — *Napoli, 1632, in 4°, fol. 4.* (C. A.).
- ORME W. — View of the last eruption of Mount Vesuvius from an original painted at Naples. Dedic. to Sir W. Hamilton. (Probably erupt. 1794. — *London, ? Col. transparency of a steel engraving in 1 R. fol. (In the collection of Mr. L. Sambon, Naples.*
- ORRIGONE C. G. — Pensieri poetici (erupt. 1631). — *Genova, 1636, in 8°, pp. 108-119.* (C. A.).
- OTTAVIANO C. — Alla Maestà di Ferdinando IV Re delle Due Sicilie per la terribile eruzione del Vesuvio. Sonetto. — ?, *loose sheet.* (B. N.).
- PACICHELLI G. B. — Memorie de' viaggi per l'Europa Christiana scritte a diversi in occasione de' suoi Ministeri. — *Napoli, 1685, vols. 5, in 12. Parte I. pp. 40+743+53. Parte II. 8+827+40. Parte III. 8+761+27. Parte IV. vol. I. 4+541+20. Parte V, Vol. II. 4+438+18. (Parte IV. Vol. II. pp. 255 and follow. Del Vesuvio).*
- PACICHELLI G. B. — Lettere familiare, istoriche ed erudite, etc. — *Napoli, 1695, Vols. II, in 12°. See. Vol. II, pp. 343-353.* (B. N.).
- PADAVINO M. A. (According to Castelli P.). — Lettera narratoria a pieno la verità dei successi del Monte Vesuvio detto di Somma, seguiti dalli 16 Dicembre fin alli 22 dell'istesso mese. — *Roma, 1632, in 8°, pp. 14.* (C. A.).
- PADERNI C. — An account of the late Discoveries of Antiquities at Herculaneum. — *Phil. Trans. 1756, pp. 490-508.* (C. A.).
- PADERNI C. — An account of the late Discoveries of Antiquities at Herculaneum, and of an Earthquake there. — *Phil. Trans. 1758, Vol. I, pp. 620-623.* (C. A.).
- PALATINO L. — Storia di Pozzuoli e contorni con breve trattato storico di Ercolano e Pompei. — *Napoli, 1826, in 8°, pp. 336, pl. 1, maps 2.* (C. A.).
- PALMERI P. — Sulla cenere lanciata dal Vesuvio a Portici e a Resina la notte del 3 a 4 Aprile 1876. Ricerche chimiche. — *Rend. R. Acc. Sc. Fis. Mat. An. XVI, 1876. pp. 73-74,*

- 87-95. (C. A.). *Also: Ann. d. R. Sc. Sup. Agric. Portici, Napoli, 1878.*
- PALMIERI P. — Il pozzo artesiano dell'Arenaccia del 1880 confrontato con quello di Palazzo Reale di Napoli del 1847. — *Lo Spettatore del Vesuvio e dei Campi Flegrei. Nuova Serie, Vol. I, Napoli, 1887, col. pl. 1.*
- PALMIERI L. — Studj Meteorologici fatti sul Real Osservatorio Vesuviano. — *Napoli, 1853, in 4^o, pp. 22.*
- PALMIERI L. — Disquisizioni accademiche sulle scoperte Vesuviane attinenti alla elettricità atmosferica. — *Napoli, 1854, in 4.^o p. 33. 1 pl.*
- PALMIERI L. — Eruzione del Vesuvio del 1^o Maggio 1855 studiata dal R. Osservatorio Meteorologico Vesuviano. — *Il Nuovo Cimento, Giorn. d. Fis., Chim. e St. Nat. Vol. I, Pisa, 1855. Also, Giornale Ufficiale del Regno delle Due Sicilie, Napoli, 25 Mag. 1855, pp. 1, in fol.*
- PALMIERI D. — Alcune osservazioni sulle temperature delle fumarole che si generano sulle lave del Vesuvio. — *Il Nuovo Cimento, Giorn. d. Fis. etc. Vol. V, Pisa, 1857.*
- PALMIERI L. — Osservazioni di meteorologia e di fisica terrestre fatte durante l'eruzione del Vésuvio del Maggio 1855. — *Il Nuovo Cimento. Giorn. di Fis. etc. Vol. V, Pisa, 1857.*
- PALMIERI L. — Sur l'éruption actuelle du Vésuve. — *Lettre à Deville—Compt. Rend. d. l'Acad. d. Sc. Vol. XLV. Paris, 1857, pp. 549-550.*
- PALMIERI L. — Sur le Vésuve Lettre a Deville. — *Compt. Rend. Acad. Sc. Vol. LXVI, Paris, 1858, pp. 1219-1220.*
- PALMIERI L. — Annali del Reale Osservatorio Meteorologico Vesuviano. Anno Primo 1859. — *Napoli 1859. — Biblioteca Vesuviana — Anno Secondo 1862. Napoli 1862. vol. 2, in 8^o (Vol. I, pp. 80 + XVIII + 2. Vol. II, pp. VII + 88 + 1).*
- PALMIERI L. — Sur l'éruption du Vésuve. Lettre à Deville. — *Compt. Rend. d. l'Acad. d. Sc. Vol. LIII. Paris, 1861, pp. 1231-1233.*
- PALMIERI L. — Relazione intorno allo incendio del Vesuvio cominciato il dì 8 Dic. 1861. — *Il Nuovo Cimento. Vol. XV. Pisa, 1862. Also, Rend. Accad. Pontaniana, 1862, Napoli, in 8^o, pp. 36, pl. 2.*
- PALMIERI L. — Notizie sulle scosse di terremoto segnate dal sismografo elettro-magnetico dopo l'incendio del Vesuvio cominciato il dì 8 Dic. 1861. — *Napoli, 1862.*
- PALMIERI L. — Sur les phénomènes électriques qui se sont produits dans la fumée du Vésuve pendant l'éruption du 8 dé-

- cembre 1861.—*Comp. Rend. Acad. Sc., t. LIV, Paris, 1862, pp. 14. (C. A.)*.
- PALMIERI L. — Sur les secousses de tremblement de terre ressenties à l'Observatoire du Vésuve pendant les mois de Décembre 1861 et Janvier 1862. — *Compt. Rend. d. l'Acad. d. Sc. Vol. LIV. Paris, 1862, pp. 608-611.*
- PALMIERI L. — Delle scosse di terremoto avvenute all'Osservatorio Meteorologico Vesuviano nell'anno 1863, quali furono registrate dal sismografo elettro-magnetico — *Rend. R. Accad. Sc. Fis. Mat. Napoli, Vol. III. 1864.*
- PALMIERI L. — Il Vesuvio dal 10 Febbraio al 5 Marzo del 1865. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. Vol. IV. Napoli, 1865.*
- PAEMIERI L. — Il Vesuvio, il terremoto di Isernia e l'eruzione sottomarina di Santorino — *Rend. d. R. Acc. d. Sc. Fis. e Mat. An. V. Napoli, 1866, pp. 2.*
- PALMIERI L. — Dell'incendio vesuviano cominciato il 13 Novembre 1867. — *Napoli, 1867.*
- PALMIERI L. — Di alcuni prodotti trovati nelle fumarole del cratere del Vesuvio. — *Rend. d. R. Acc. d. Sc. An. VI. Napoli, 1867, pp. 2.*
- PALMIERI L. — Nuove corrispondenze tra i terremoti del Vesuvio e l'eruzioni di Santorino. — *Rend. d. R. Acc. d. Sc. An. VI. Napoli, 1867, pp. 2.*
- PALMIERI L. — Sur les produits ammoniacaux trouvés dans le cratère supérieur du Vésuve. — *Compt. Rend. d. l'Acad. d. Sc. Vol. LXIV. Paris, 1867, pp. 668-669.*
- PALMIERI L. — Faits pour servir à l'histoire éruptive du Vésuve. — *Compt. Rend. d. l'Acad. d. Sc. Vol. LXV, Paris, 1868, pp. 897-898; Vol. LXVI, pp. 205-207, 756-757, 917-918.*
- PALMIERI L. — Dell'incendio del Vesuvio cominciato il 13 novembre del 1867. Sunto di una relazione dell'Autore. — *Rend. R. Accad. Sc. Fis. Mat. An. VII, Napoli, 1868, pp. 76-77.*
- PALMIERI L. — Relazione delle eruzioni del Vesuvio dal 13 Novembre 1867 fino al 30 Maggio 1868. — *Atti d. R. Acc. d. Sc. Vol. VI. Napoli, 1868.*
- PALMIERI L. — Ueber den neuen Ausbruch des Vesuv. — *Verhandl. der K. K. Geologisch. Reichs-Anst. Wien, 1867. Und Fortsetzung, 1868.*
- PALMIERI L. — Nuovi fatti di corrispondenza tra le piccole agitazioni del suolo al Vesuvio ed i terremoti lontani. — *Rend. d. R. Acc. Sc. An. VIII, Napoli, 1869, pp. 179.*
- PALMIERI L. — Osservazioni sul terremoto del 26 Agosto 1869. —

- Rend. d. R. Acc. d. Sc. di Napoli, An. VIII. Napoli, 1869, pp. 179.*
- PALMIERI L. — Il terremoto di Calabria ed il sismografo vesuviano. — *Rend. d. R. Acc. d. Sc. di Napoli. Vol. IX. 1870.*
- PALMIERI L. — Indicazioni del sismografo dell'osservatorio Vesuviano del 1° Dic. 1869 al 31 Dic. 1870. — *A note inserted in « Memoria sopra i terremoti della Prov. di Cosenza nell'anno 1870 del Sig. Dott. Conti ».*
- PALMIERI L. — Qualche osservazione spettroscopica sulle sublimazioni vesuviane. — *Rend. d. R. Acc. d. Sc. di Napoli, An. IX, Napoli, 1870, pp. 58-59.*
- PALMIERI L. — Ultime fasi delle conflagrazioni vesuviane del 1868. *Rend. d. R. Acc. d. Sc. di Napoli. An. VIII, 1869, pp. 44-48.* — *Il Nuovo Cimento. Ser. 2ª, Vol. III. Pisa, 1870.*
- PALMIERI L. — Indicazioni del Sismografo dell'Osservatorio Vesuviano del 1° dicembre del 1869 al 31 dicembre del 1870. — *Rend. R. Accad. Sc. Fis. Mat. An. X, Napoli, 1871, pp. 16-17.*
- PALMIERI L. — Il Litio ed il Tallio nelle sublimazioni vesuviane. — *Rend. d. R. Acc. d. Sc. di Napoli, An. X, 1871, pp. 124.*
- PALMIERI L. — Intorno ad un Lapillo filiforme eruttato dal Vesuvio. — *Rend. d. R. Acc. d. Sc. di Napoli. An. X. 1871. pp. 51-52.*
- PALMIERI L. — Le lave del Vesuvio guardate con lo spettroscopio. — *Rend. d. R. Acc. d. Sc. di Napoli An. X, 1871, pp. 33-34.*
- PALMIERI L. — Osservazioni microscopiche sulle sabbie eruttate dal Vesuvio nei mesi di Gennaio e Febbraio del 1871. — *Rend. d. Acc. R. d. Sc. di Napoli. An. X. 1871, pp. 34-35.*
- PALMIERI L. — Sopra qualche legge generale cui obbediscono le sublimazioni del Vesuvio, delle fumarole delle lave del Vesuvio. — *Rend. d. R. Acc. d. Sc. di Napoli, An. X, 1871, pp. 90-93.*
- PALMIERI L. — Trasformazione di alcuni cannelli di vetro rimasti per lungo tempo in una fumarola. — *Rend. R. Accad. Sc. Fis. Mat. An. X, Napoli, 1871, pp. 124.*
- PALMIERI L. — Il solfato di zinco fra le sublimazioni vesuviane. — *Rend. R. Accad. Sc. Fis. Mat. An. X, Napoli, 1872, pp. 13.*
- PALMIERI L. — L'incendio vesuviano del 26 Aprile 1872. Conferenza tenuta nel dì 9 maggio coll'analisi chimica delle ceneri cadute il 28 Aprile, del Prof. G. Catalano. — *Napoli, 1872, in 12º, pp. 12. (C. A.).*
- PALMIERI L. — Annali del R. Osservatorio meteorologico Vesuviano. 1º Ser. — *Napoli, 1869-72. 2ª Ser. Napoli, 1873.*

- PALMIERI L. — Carbonati Alealini trovati tra' prodotti vesuviani. — *Rend. R. Acc. Sc. Fis. Mat. An. XII, Napoli, 1873, pp. 92.*
- PALMIERI L. — Dell'incendio vesuviano del 26 Aprile 1872. — *Atti d. R. Acc. d. Sc. e Belle Lett. An. IX, Napoli, 1872, pp. 157-158.* — In German: *Leipzig, and Berlin, 1872, pl. 7.* In English, with introd. by R. Mallet. *London, 1873, pl. 8.*
- PALMIERI L. — Del sale ammoniaco giallo e della Cotunnia gialla. — *Rend. R. Accad. Sc. Fis. e Mat. An. XII, Napoli, 1873, pp. 92-94.*
- PALMIERI L. — Indagini spettroscopiche sulle sublimazioni vesuviani. — *Rend. R. Accad. Sc. Fis. Mat. An. XII, Napoli, 1873, pp. 47-48.*
- PALMIERI L. — La conflagrazione vesuviana del 26 Aprile del 1872, riferita all'Acc. delle Scienze Fis. e Mat. — *Napoli, 1873, in 4°, pp. 64, pl. 5. (C. A.).*
- PALMIERI L. — Recherches spectroscopiques sur les fumeroles de l'éruption du Vésuve en Avril 1872 et état actuel de ce volcan. — *Compt. Rend. d. l'Acad. d. Sc. Vol. LXXVI. Paris, 1873.*
- PALMIERI L. — Sepolcri antichi scoperti sul Vesuvio. — *Rend. d. R. Acc. d. Sc. Fis. ecc. An. XI, Napoli, 1872, pp. 2.*
- PALMIERI L. — Sopra alcuni fenomeni notati nell'ultimo incendio vesuviano del 26 Aprile 1872. — *Rend. d. R. Acc. d. Sc. An. XI, Napoli, 1872, pp. 108.*
- PALMIERI L. — Sul ferro oligisto trovato entro le bombe dell'ultima eruzione del Vesuvio — *Rend. R. Accad. Sc. Fis. Mat. An. XII, Napoli, 1873, pp. 48.*
- PALMIERI L. — Sulle fumarole eruttive osservate nell'incendio vesuviano del 26 Aprile 1872. — *Rend. R. Acc. Sc. Fis. Mat. An. XII, Napoli, 1873, pp. 143.*
- PALMIERI L. — Cronaca del Vesuvio, Sommario della storia dei principali accendimenti del Vesuvio dal 1840 fino al 1871, seguito da estesa relazione dell'ultimo incendio del 1872. — *Napoli, 1874.*
- PALMIERI L. — Del peso specifico delle lave vesuviane nel più perfetto stato di fusione. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. An. XVI, Napoli, 1875, pp. 214-215. Riv. Scient. Napoli, 1876.*
- PALMIERI L. — Il cratere del Vesuvio nel di 8 Novembre 1875 (estratto di una lettera del giovane Alpinista, G. Chiarini. — *Rend. R. Accad. Sc. Fis. Mat. An. XV, Napoli, 1876, pp. 9-10, fig. 1.*
- PALMIERI L. — Il terremoto del 6 Dic. 1875. — *Rend. d. R. Acc. d. Sc. Fis. etc. An. XIV, Napoli, 1875, pp. 215-216.*

- PALMIERI L. — Il Tallio nelle presenti sublimazioni vesuviane. — *Rend. d. l. R. Acc. d. Sc. Fis. etc. Napoli, An. XVI, 1877, pp. 179-180.*
- PALMIERI L. — Sulla cenere lanciata dal Vesuvio a Portici e Resina la notte del 3 al 4 Aprile 1876. — *Rend. d. R. Acc. d. Sc. Fis. etc. Fasc. IV. Napoli, 1876. — Ann. d. R. Sc. Sup. di Agr. in Portici. Napoli, 1878.*
- PALMIERI L. — Del Vesuvio dei tempi di Spartaca e di Strabone e del precipuo cangiamento avvenuto nell'anno 79 dell'Era volgare. — *See, Num. and Not. publ. by the Uff. Tecn. degli scavi. Pag. 91-94, pl. 1. Napoli, 1879. See also « Pompei e la Regione Sottterrata » etc.*
- PALMIERI L. — Specchio comparativo della quantità di pioggia caduta nell'anno meteorico 1880 nelle stazioni di Napoli (Università) e Vesuvio (O. V.). — *Rend. R. Accad. Sc. Fis. Mat. An. XIX, Napoli, 1880, pp. 179-180.*
- PALMIERI L. — Della Riga dell'Helium apparsa in una recente sublimazione vesuviana. — *Rend. R. Accad. Sc. Fis. Mat. An. XX, Napoli, 1881, pp. 233.*
- PALMIERI L. — Nuove esperienze che rifermano le antecedenti sull'origine dell'elettricità atmosferica. Appendice alla memoria inserita nel tomo IV della Società Italiana delle Scienze. — *Atti. R. Acc. Sc. Fis, Mat. ?, Napoli, 1886, pp. 24.*
- PALMIERI L. — Il Vesuvio e la sua storia. — *Milano, 1880. See also: Lo Spettatore del Vesuvio e dei Campi Flegrei, Nuova serie, Vol. 1.º Napoli, 1887.*
- PALMIERI L. — L'elettricità negl'incendi vesuviani studiata dal 1855 fin'ora con appositi istrumenti. — *Lo Spettatore del Vesuvio e dei Campi Flegrei. Nuova serie, Napoli, 1887, in 4.º, pp. 77-79.*
- PALMIERI L. — Azione de' terremoti dell'eruzioni vulcaniche e delle folgori sugli aghi calamitati. — *Rend. R. Accad. Sc. Fis. Mat. Napoli, 1888, pp. 3.*
- PALMIERI L. — Le correnti telluriche all'Osservatorio vesuviano osservate per un anno intero non meno di quattro volte al giorno. — *Rend. R. Accad. Sc. Fis. Mat. Napoli, 1890, pp. 6.*
- PALMIERI L. — Osservazioni simultanee sul dinamismo del Crotere vesuviano e della grande fumarola della Solfatara di Pozzuoli fatte negli anni 1888-89-90. — *Rend. R. Acc. Sc. Fis. Mat. Napoli, 1890, pp. 3.*
- PALMIERI L. — Elettricità atmosferica, continuazione degli studi meteorologici fatti sul Reale Osservatorio Vesuviano. — *Pe-*

- lorama Pittoresco*. N.º 23, 24, 25, Anno XV, in 4º, pp. 8-11. pl.
- PALMIERI L. e DEL GAIZO M. — Il Vesuvio nel 1887. — (*Annuario Met. Il. anno III*). Torino, 1888.
- PALMIERI, SCACCHI E GUARINI. — Memoria sullo incendio vesuviano del mese di Maggio 1855. Preceduta dalla relazione dell'altro incendio del 1850 fatta da A. Scacchi—*Napoli, 1855, in 4º, pp. VIII—207, con 7 tavole litografiche.*
- PAOLI F. — Per l'andata al Vesuvio de Marchese di Palombara. Sonetti due. — *See Giorgi Urbano*. (C. A.).
- PAPACCIO G. S. (venditor d'oglio). — Relatione del fiero, et iracondo incendio del Monte Vesuviano flagello occorso a 16 di Dicembre 1631, nella montagna di Soimma all'incontro sei miglia della fedelissima e famosissima Città. In ottava rima. — *Napoli, 1632, in 4º, fol. 4.* (C. A.).
- PARAGALLO G. — Istoria naturale del monte Vesuvio, divisa in 2 libri. — *Napoli, 1705, in 4º, fol. 10, pp. 430.*
- PARKER J. — Part of a letter concerning the late Eruption of Mount Vesuvius 1751. — *Philos. Trans. of the R. Soc. of London. London, 1752, Vol. XLVII, pp. 474-475.*
- PARRINO D. A. — Relazione dell'eruzione del Vesuvio nel 1694. — *Napoli, 1694.*
- PARRINO D. A. — Succinta relazione dell'incendio del Vesuvio nel 1696. — *Napoli, 1696.*
- PARRINO D. A. — Moderna distintissima descrizione di Napoli Città nobilissima, antica e fedelissima, e del suo Seno Cratere. — Aggiunte, osservazioni, e correzioni a questo primo tomo della nuova descrizione di Napoli. — *Napoli, 1703-1704, vol. in 12.º (Vol I. pp. 20 + 438 + 54. 46 + 2. Vol. II. pp. 16 + 292 + 23. pl. XXVIII, fig. See. Vol. II, pp. 205-235.).*
- PARRINO D. A. — Nuova guida per l'antichità di Pozzuoli, e di tutte le Città, luoghi e Isole, che sono alla veduta presso il mare dalla parte destra della Città di Napoli. — *Napoli, 1751, in 12. pp. 257 + 7 + XXVII, pl. (See Parte II, pp. 182-220.).*
- PARRINO D. A. — Nuova guida dei Forestieri per osservare e godere le curiosità più vaghe della fedelissima gran Napoli. — *Napoli, 1709, and 1725; in 12º, fol. 18, pp. 382, fol 6, pl. 40 (C. A.). Another edition 1751, in 12º, fol. 2, pp. 269 + 18 pl. 38, maps 9. See pp. 181-218. (C. A.).*
- PARTENIO (accademico). — La morte; Idillio fatto in occasione dell'incendio del Monte Vesuvio, ed una canzonetta sopra la stella apparsa nel medesimo tempo sopra detto monte. — *Roma, 1632, in 4º, fol. 4. (O. V.).*

- PASQUALE G. A. — Flora Vesuviana, o catalogo ragionato delle piante del Vesuvio confrontate con quella dell'isola di Capri e di altri luoghi circostanti. — *Atti d. R. Accad. d. Sc. di Napoli*, 1868, pp. 142. (C. A.).
- PASSE C. (DE). — Uvaerachtige af-beeldinge van den schricklijken Brandende Bergh Somma (anders genoemd Vesuvi,) gelegen vande wijtberoemde Stadt Neepolis een uyre gaens, die meteen onuytspreעהenlijk Dyer en Waer noch dagelijer der Stadt groodelijer beschadicht, als blijkt wt dit nae-volgende. As ghebeeldt ende overgeset iyt het Italiens nae de Roomsche Copye. — *Engraved plate of erupt. 1631, with 3 columns of explanation*. (C. A.).
- PASSERI G. — Saggio di Poesie. — *Napoli*, 1766, in 8°, pp. 7 + 202 + 1. *Cantata sul Vesuvio* (pp. 114-126.).
- PAYAN D. — Notice sur quelques [volcans de l'Italie méridionale. — *Bull. Soc. Stat. Arts Utiles, Sc. Nat. du Départ. Drôme*, t. III, in 8°, 1842, pp. 145-163. (C. A.).
- PELLEGRINI G. — Il Vesuvio, poemetto. — *Bassano*, 1785, in 8°. pp. 112, frontisp. (C. A.). *Bassano*, 1798, in 8°, fol. I, pp. 301. (O. V.). *Palermo*, 1814, in 8°, pp. 108, fol. 1. (O. V.).
- PELLEGRINO C. — Discorso istorico dell'incendii naturali del Monte Vesuvio ed altri luoghi di Terra di Lavoro detti anticamente Campania, raccolto in un manoscritto a di 16 dicembre 1631. — *M. S. (fol. 15) Copy of a M. S. belonging to Signor Adolfo Parascandolo*. (C. A.).
- PELLICER (DE) TOVARJ. — Estancias al Vesuvio ed un epigramma. — *See de Quinones*. (C. A.).
- PEPE A. — Il medico clinico o sia dissertazione fisico-medica (speaks in Chap. I, of the eruption of Vesuvius 1767). — *Napoli*, 1768, in 4°. fol. 6, pp. 178, fol. 1°. (C. A.).
- PERENTINO GIANO (Pietro Giannone). — Lettera ad un suo amico che lo richiedeva onde avvenisse che nelle due cime del Vesuvio, ecc. — *Napoli*, 1718, in 4°, p. 3. (O. V.).
- PEREZ DE MONTALVAN J. — Sonetto (Erupt. 1631). — *See de Quinones*. (C. A.).
- PERI D. — Sull' eruzione del Vesuvio del 15 giugno 1794. — *Anacreontica*. (O. V.).
- PERILLO D. — Vero e distinto ragguaglio di ciò etc. — spaventevole fiumana di fuoco scoppiato dal Monte Vesuvio in camminarsi al di lei danno e sterminio. — *Napoli*, 1755, in 4°, p. 76. (O. V.).
- PERROTTA F. — Relatione del nuovo incendio del Monte Vesuvio delli 3 luglio 1660 del medico fisico Francesco Perrotta di

- Piedimonte d'Alife, medico della Torre del Greco. — *M. S. in* (O. V.).
- PERROTTI A. — Discorso astronomico sopra li quattro Ecclissi del 1632 et uno del 1633. — *Napoli, 1632, in 4^o, fol. 26.* (C. A.).
- PESCE D. — Il povero lacrimante sopra alcune dimostrazioni di Fisica naturale del Gran Monte Vesuvio. — *M. S., 1767, in 4^o, fol. 34.* (O. V.).
- PETRIS (DE) FR. — De Vesuvij conflagratione. — *Distico, in Mormile.*
- PETRIZZI ANT. DA. — Lettera a Sua Eccellenza il signor D. Francesco Ant. Marmigola Duchino di Petrizzi sulla lava eruttata dal fianco, o pendici del Vesuvio ad ore due, e minuti 10, di notte circa, del dì 15 Giugno, 1794. — *?, in 12^o, and in 4^o, (B. N.).*
- PHILIPPI R. A. — Nachricht über die letzte Eruption des Vesuvs. — *Neues Jahrb. für Mineralog. Geognos. etc. Stuttgart, 1841, in 8^o, pp. 59-69.*
- PHILIPPI R. A. — Relief des Vesuvs und seiner Umgegend. — *Bericht über die Versamml. der Deutsch. Naturforsch. u. Aerzte. Bd. VII. 1842.*
- PHILLIPS J. — Vesuvius. — *Oxford, 1869. London 1872, pp. XVII + 355, pl. 10, map. 1, figs. 35.*
- PIAGGIO A. — Furentis Anno MDCCLXXIX Vesuvii prospectus. — *Plate engraved by Cataneo at the back of which is a sonnet by the Duca di Belforte.* (C. A.).
- PIAZZAI S. — Sonetti due (1631). — *See G. Urbano.* (C. A.).
- PICCININI D. — Per la eruzione del Vesuvio, accaduta nell'anno 1822. Verses in neapolitan dialect. — *Poesie italiane e in dialetto napolitano, Napoli, 1827, in 8^o, pp. 49-64.* (C. A.).
- PIETRO FR. (DI). — I problemi accademici ove le più famose quistioni proposte nell'Ill. Accademia degli Otiosi di Napoli si spiegano. — *Napoli, 1642, in 4^o, pp. 40+317+25. — V. Problema LXXX. Dell' incendio del Monte Vesuvio arrenuto ai 16 di Dicembre 1631. (pp. 217-220.)*
- PIETRO M. (DI). — 1822. — *See Grifoni E.*
- PIETROSIMONE N. — Descrizione istorica-cronologica delle principali eruzioni del Vesuvio tolte dalle opere di Luigi Galante e riportato nell'istoria dei monumenti di Napoli da Camillo Napol e Sasso, con due sonetti sul Vesuvio del Pietrosimone. — *« L'Ateneo Popolare » Napoli, 1868, in 8^o, pp. 80, pl. 62.* (C. A.).
- PIGHIIUS CAMPENSIS. — Hercules prodicius sen principis juvenu-

- tus, etc. — (*Describes the Vesuvian crater previous to 1631 Antuerpiae, 1587*). (O. V.).
- PIGNANT. — Sur une éruption du Vésuve le 11 Mars 1866. — *Compt. Rend. Acad. Sc. Paris, 1866, t. LXII, p. 749*. (C. A.).
- PIGONATI A. — Descrizione delle ultime eruzioni del Vesuvio dai 25 Marzo 1766 fino a' 10 Dicembre dell'anno medesimo. — *Napoli, 1767, in 8°, fol. 4°, pp. 28, pl. 3*. (O. V.) *Varying editions*.
- PIGONATI A. — Descrizione dell'ultima eruzione del Vesuvio dei 19 ottobre 1767, in seguito dell'altra del 1766 — *Napoli, 1768, in 8°, pp. 23, pl. 4, fig. Varying editions, one in 4.*
- PIGONATI — Relazione della straordinaria eruzione del Monte Vesuvio nel dì 8 Aprile 1779. — *Opuscoli Scelti Sulle Scienze e Sulle Arti, Milano, 1778, t. II, parte IV, pp. 310-312, in 4°, (C. A.)*.
- PILLA L. — Sur l'éruption du Vésuve en Juillet et Août 1832 — *L'Osservatore del Vesuvio. N.° 3; Bibl. Univ. T. 52, Avril 1833, pp. 351-356*.
- PILLA L. — Narrazione d'una gita al Vesuvio fatta nel dì 26 gennaio 1832. — *Il Progresso d. Sc. Lett. ed Arti. Vol. I Napoli, 1832*.
- PILLA L. — Bollettino geologico del Vesuvio e dei Campi Flegrei, destinato a far seguito allo Spettatore del Vesuvio. — *Ann. d. R. Oss. Vesuv. Napoli, 1833-34, in 8°, pp. 35, 30, 28, 31, 40, complete*. (O. V.).
- PILLA L. — Esposizione dei fenomeni osservati nel cratere del Vesuvio durante l'eruzione del 1833. — (?)
- PILLA L. — Ausbrüche des Vesuvs im Anfange Aprils 1835. — *Neues Jahrb. für Mineralog. etc. Stuttgart, 1835*.
- PILLA L. — Bollettino geologico del Vesuvio e dei Campi Flegrei. — *Il Progresso d. Sc. etc. Vol. VIII, IX, X, e XVI. Napoli, 1834-1837*.
- PILLA L. — Observations tendantes à prouver que le cône du Vésuve a été primitivement formé par soulèvement. — *Compt. Rend. d. l'Acad. des Sc. Vol. IV. Paris, 1837*.
- PILLA L. — Parallelo fra i tre Vulcani ardenti dell'Italia. Napoli, 1835. — *Atti d'Acc. Gioenia d. Sc. Nat. di Catania. Vol. XII. Catania, 1837, p. 39. Jahrb. f. Min. Stuttgart, 1836, p. 347*.
- PILLA L. — Sur des coquilles trouvées dans le Fossa Grande de la Somma. — *Bul. Soc. Géol. France. t. VIII, pp. 199-201, 3 Avril, 1837, and, pp. 217-224, 17 Avril, 1837*. (C. A.).

- PILLA L. — Ventesimo viaggio al Vesuvio il 21 e 22 Agosto. — *Il Progresso d. Sc. etc. Vol XVI. Napoli, 1837.*
- PILLA L. — Ventitresima gita al Vesuvio nell'a notte del 13 al 14 Settembre, 1834. — *Il Progresso d. Sc. etc. Napoli, 1838, fol. 7. Spettatore del Vesuvio. Fasc. XI. Napoli, 1838.*
- PILLA L. — Ausbruch des Vesuvs Anfangs Januar 1839. — *Neues Jahrb. für Mineralog. etc. Stuttgart, 1839.*
- PILLA L. — Relazione dei fenomeni avvenuti nel Vesuvio nei primi del corrente anno 1839. — *Il Progresso d. Sc. etc. Vol. XXII. Napoli, 1839, pp. 29-41.*
- PILLA L. — Sur la dernière éruption du Vésuve. — *Compt. Rend. d. l'Acad. d. Sc. Vol. VIII, Paris, 1839.*
- PILLA L. — Sur l'éruption du Vésuve en Janvier, 1839. Lettre à M. Elie de Beaumont. — *Compt. Rend. Acad. Sc. Paris, t. VIII, 1839, pp. 250-253. (C. A.)*
- PILLA L. — Observations relatives au Vésuve. — *Compt. Rend. d. l'Acad. d. Sc. Vol. XII. Paris, 1841.*
- PILLA L. — Sur quelques minéraux recueillis au Vésuve et à la Rocca Monfina. — *Compt. Rend. l'Acad. d. Sc. Vol. XXI. Paris, 1845.*
- PILLA L. — Catalogue de collections des minéraux et de laves du Vésuve à vendre. — *Without date or locality, in 8°, fol. 2. (C. A.)*
- PILLA L. AND CASSOLA — Lo Spettatore del Vesuvio e dei Campi Flegrei. — *Napoli, 1832-33, in 8°.*
- PILLA N. — Geologia Volcanica della Campania. — *Napoli, 1823. 2, Vols in 8°, (Parte I. pp. XIX + 124 + 1) Parte II. pp. 159 + 1.*
- PINA JUAN (DE). — Al Bolcan di Soma; Soneto. — *See de Quinones. (C. A.)*
- PISANI F. — Rapport sur l'éruption du Vésuve du 24 au 30 Avril 1872. — *Bull. d. l. Soc. Géol. de France, 2.^a Sér. Vol. XXIX. Paris, 1872.*
- PLACIDO F. — Dialogo sopra il miracolo del Gloriosissimo Protettore della Città e del Regno di Napoli S. Gennaro. — ?(B. N.).
- PLANGENETO U. — La lacrima del Monte Vesuvio volgarmente Lacryma Christi. — *Ditirambo. Napoli, 1811 in 12, p. 67.*
- PISTOLESI E. — Real Museo Borbonico descritto ed illustrato. — *Roma, 1836, in 4°, See Vol. I, pp. 5-91.*
- PITARO A. — Esposizione delle sostanze costituenti la cenere vulcanica caduta in questa ultima eruzione de' 16 di Giugno 1794. — *Napoli, 1794, in 8°, pp. 22.*
- PLINY C. S. C. — Letters, with observations on each letter, and

- an essay on Pliny's Life, addressed to Charles Lord Boyle by John Earl of Orrery. — *London, 1751, 2 Vols, in 8^o, with figs (Vol. I. pp. IV+LXX+397+34.) (Vol. II. pp. 2+450+53.)*
- PLINII CAECILII SECUNDI C. — Epistolae lib. IX. ejusdem et Trajani Imp. Epist. etc. adjectae sunt Isaaci Casauboni notae in Epist. variae lectiones ultra precedentes, in hac posteriori editione marginis accesserunt. — *1632, in 16^o, p. 862.*
- POLI G. AND LAURIA G. A. — Prosa Elegiaca per Giacinto Poli e fotografia morale del giovane Vitangelo Poli vittima della esiziale eruzione del Vesuvio nella notte del 25 Aprile 1872. — *Napoli, 1872. in 4^o, p. 20. (C. A.)*
- POLI G. S. — Saggio di Poesie. — *Palermo, 2 Vols, in 4^o, divisi in quattro parti. (Vol. I, Parte I e II, pp. 10+337. Vol. II. Parte I e II. pp. 366+6.) Il Vesuvio, Poemello. Vol. I. part. I. pp. 1+21. Dissertazione intorno al Vesuvio, etc. Vol. II, pt. II, pp. 247+292.*
- POLI G. S. — Dissertazione intorno al Vesuvio in cui si ragiona del suo stato sì antico che recente—(?) in 8^o, pp. 46. *Ext. works of author.*
- POLLERA G. D. — Relatione dell'incendio del monte di Somma successa (sic) nell'anno 1631, nella quale si rendono le ragioni di molte cose le più desiderabili. — *Napoli, 1632, in 8^o, fol. 8. (B. N.)*
- POMPEI e la regione sotterrata dal Vesuvio nell'anno LXXIX. Memorie e notizie pubblicate dall'Ufficio Tecnico degli Scavi delle Provincie Meridionali. — *Napoli, 1879, in fol. pt. I, pp. 291, pt. 2., pt. II, p. 243. (C. A.)*
- PONTANO. — La seconda parte delli avvisi del Rev. Pad. Pontano, etc. Di tutto quello, ch'è successo in tutta la seconda settimana. Et così l'haverete d'ogni sette in sette giorni. — *Napoli, 1632, in 4^o, (B. N.)*
- PORRATA S. — Discorso sopra l'origine dei fuochi gettati dal monte Vesevo, ceneri, etc. — *Lecce, 1632, in 4^o, fol. 3, pp. 55.*
- PORTII L. A. — Opera omnia, etc. in unum collecta atque ad meliorem, commodioremque formam redacta cura restudio Francisci Portii. — *Vol. II, (O. V.)*
- PORZIO L. A. — Lettere e discorsi Accademici. — *Napoli, 1711, in 4^o, pp. 8+347. See. pp. 174-186.*
- PREVOST C. — Etudes des phénomènes volcaniques du Vésuve et de l'Etna. — *Compt. Rend. d. l'Acad. d. Sc. Vol. XLI. Paris, 1855, p. 794-797.*
- PREVOST C. — Sur les coquilles marines trouvées à la Somma. — *Compt. rend. d. l'Acad. d. Sc. Vol. IV. Paris, 1837.*

- PRINCIPE DI ESQUILLACE. — Sonetto (1631). — *See de Quinones*. (C. A.),
- PRINA L. G. — Ascensione al Vesuvio. — *Novara*, 1874, in 8°, pp. 15. (C. A.).
- PRISCO C. — Componimento in versi latini sull' incendio del Vesuvio. — *Napoli*, 1832, in 4°, pp. 31, (O. V.).
- PROCTOR R. A. — Le Vésuve et Ischia. — *Revue Mens. d'Astron. Pop. Paris*, Sept. 1883, pp. 340-343. (C. A.).
- PROST. — Trépitations du sol à Nice pendant l'éruption du Vésuve. — *Compt. Rend. Acad. Sc. Paris t. XLIV*, 1862, pp. 511-512. (C. A.).
- PULSINI V. — Sonetto (erupt. Vesuvius, Aug. 12th, 1805. — *See Cillunzio, Neante*. (B. N.).
- P. R. — 2^a lettera. Raccolta di monumenti sopra l'eruzione del Vesuvio seguita nell'agosto, 1779. — *Giornale delle Arti e del Commercio*. Vol. I, Macerata, 1780, in 8°, al pp. 141, and following. (O. V.).
- PUTIGNANI J. D. — De redivivo sanguine D. Januarii Episcopi ed Martyris. — *Napoli*, 1723-26. Vols. III, in 4 parts, in 4°. *See pt. I*, pp. 155-188, and *pt. IV*, pp. 130-154.
- QUARANTA A. — Tre fugitivi, Dialogo, ove brevemente si dà ragguaglio dei principali successi, nell'Incendio di Vesuvio. — *Napoli*, 1632, in 12°, pp. 35. (C. A.).
- QUEVEDO VILLEGAS F. DE. — Al Vesuvio que interpoladamente es jardin y Bolcan. Sonetto. — *See Quinones*. (C. A.).
- QUINONES J. DE. — Epigramma. Acrostico — *See Quinones: Los incendios de la Montana de Soma*. (C. A.).
- QUATTROMANI L. — Per Napoli salvata dal terremoto, e dalle lave del Vesuvio, ad intercessione di S. Gennaro. Sonetti. — ?, in 8°, pl. (B. N.).
- QUINONES J. DE. — El Monte Vesuvio aora la Montana de Soma, dedicado a D. Felipe quarto el grande mestro Señor, ecc. — *Madrid*, 1632, in 4°, fol. 16+56. *Contains in first part*. 1. *El Principe de Esquillace—Soneto*, 2. *Lopez de Zarate Francisco—Soneto*, 3. *Solis—Messia Juran—Soneto*, 4. *Villaycan Garcés (de) Gironimo—El Bolcan que aborto la Montana di Soma—Soneto*, 5. *Ramirez de Arellano Luis—Soneto*, 6. *Cardoso dott. Fernando—Al Vesuvio—Soneto*, 9. *Coruna Conde (de)—Soneto*, 10. *Lope de Vega Felix Canzone*, — 11. *Valdivielso (de) Joseph—Silva*, 12. *Queredo Villegas (de) Francisco—Al Vesuvio que interpoladamente esjardin y Bolcan—Soneto*, 13. *Perez de Montalban Juan—Soneto*, 14. *Bocangel y Vusueta—Epitafio*

- al Vesuvio, y sus incendios — Soneto, 15. Velez de Guervara Luis — a la montana de Soma — Soneto, 16. Andosilla Larramendi Juan — Al Vesuvio — Soneto, 17. Pina de Juan, Al Bolcan de Soma — Soneto, 18. Huerta (de) Antonio — Soneto, 19. Pellicer de Tovar — Estancias al Vesuvio, 20. Pellicer de Tovar — Epigramma, 21. Ruiz de Alarcon y Mendoza — Al Bolcan y incendios del Vesuvio — Soneto, 22. Hurtado de Mendoza Antonio — Dezimay, 23. Quinones — Epigramma — acrostico, 24. Caruna (de) Conde — Versi. (C. A.).*
- RAFFLES, NECKER UND DAUBENY. — Ueber die Vulkane auf Java, in den Auvergne und über den Monte Somma. — *Elberfeld, 1825.*
- RAMIREZ DE ARELLANO LUIS — Soneto — *See Quinones. (C. A.).*
- RAMMELSBERG G. — Ueber Humit und Olivins. — ? (1851), *in 8°, fol. 8. (O. V.).*
- RAMMELSBERG C. — Über den magnoferrit vom Vesuv und die Bildung des magnetisens und ähnlicher Verbindungen durch sublimation. — *Monatsb. der K. Preuss. Akad. d. Wiss. zu Berlin, 1859. — Journ. für prakt. Chemie, Bd. LXXVII. Leipzig, 1859. — Ann. der Phys. und Chemie, Bd. CVII. Leipzig, 1859.*
- RAMMELSBERG C. — Ueber mineralogische Zusammensetzung der Vesuvianen und das Vorkommen des Nephelins in denselben. — *Zeitsch. Deutsch Geol. Gesell. Bd. XI, Berlin, 1859, pp. 492-506.*
- RAMMELSBERG C. — Ueber die Chemische Zusammensetzung einiger mineralien des Vesuvs. — *Ann. der Phis. und Chemie, Bd. CIX, Leipzig, 1860.*
- RAMMELSBERG C. — Über den letzten Ausbruch des Vesuvs vom 8 December 1861. — *Zeitsch. Deutsch. Geol. Gesell. Bd. XIV. Berlin, 1862, pp. 567-574.*
- RAMMELSBERG C. — Ueber die chemische Natur des Vesuviasche des Ausbruchs von 1872. — *Zeitschr. d. Deutsch. Geol. Gesell. Bd. XXIV. Berlin, 1872.*
- RANIERI A. — Sale ammoniaco marziale raccolto sulla lava del Monte Vesuvio. — *Ann. di Chim. Vol. XLIX, Milano, 1869.*
- RATH (VOM) G. — Ueber die Zusammensetzung des Mizzonits vom Vesuv. — *Zeitschr. d. Deutsch. Geol. Gesell. Bd. XV. Berlin, 1863.*
- RATH (VOM) G. — Der Zustand des Vesuv am 3 April 1865. — *Sitz. Ber. d. Niederrhein. Naturforsch. Gesell. Bonn, 1865.*
- RATH (VOM) G. — Oligoklas vom Vesuv. — *Ann. der Phys. und Chemie. Bd. CXXXVIII. Leipzig, 1869.*

- RATH (VOM) G. — Crystallisirter Lasurstein vom Vesuv. — *Ann. der Phys. und Chemie*, Bd. CXXXVIII. Leipzig, 1869.
- RATH (VOM) G. — Ueber den Wollastonit vom Vesuv. — *Ann. der Phys. und Chemie*, Bd. CXXXVIII. Leipzig, 1869.
- RATH (VOM) G. — Orthit vom Vesuv. — *Ann. der Phys. und Chemie*, Bd. CXXXVIII. Leipzig, 1869.
- RATH (VOM) G. — Ueber die Zwillingbildungen des Anorthit vom Vesuv. — *Ann. der Phys. und Chemie*, Bd. CXXXVIII. Leipzig, 1869.
- RATH (VOM) G. — Ueber die Zwillingsgesetze der Anorthits vom Vesuv. — *Sitz. Ber. d. Niederrhein. Naturf. Gesell. Bonn*, 1869.
- RATH (VOM) G. — Ueber Humitercrystalle des zweiten Typus vom Vesuv. — *Ann. der Phys. und Chemie*. Bd. CXXXVIII. Leipzig, 1869.
- RATH (VOM) G. — Orthit und Oligocklas in den alten Auswürflingen des Vesuvs. — *Sitz. Ber. der Niederrhein Naturf. Gesell. Bonn*, 1870.
- RATH (VOM) G. — Der Vesuv am 6 und 17 April, 1871. — *Zeitschr. d. Deut. Geol. Gesell.* Bd. XXIII. Berlin, 1871.
- RATH (VOM) G. — Ein interessanter Wollastonit-Auswürfling vom Monte Somma. — *Sitz. Ber. der math. physic. Class. der K. Bayr. Akad. der Wissen.* Bd. III. München, 1871, pp. 228-231.
- RATH (VOM) G. — Ueber die letzte Eruption des Vesuv und über Erdbeben von Cosenza. — *Verhandl. des Naturh. Vereins der Preuss. Rheinl. und Westph.* Bd. XXVIII. Bonn, 1871.
- RATH (VOM) G. — Ueber den Zustand des Vesuv vor der letzten Eruption. — *Sitz. Ber. d. Niederrhein. Naturf. Gesell.* Bd. XXIX. Bonn, 1872.
- RATH (VOM) G. — Ueber einige Leucit. Auswürflinge vom Vesuv. — *Ann. der Phys. und d. Chemie*, Bd. CXLVII. Leipzig, 1872.
- RATH (VOM) G. — Ueber Vesuvische Auswürflinge der Eruption vom 26 April 1872. — *Sitz Ber. der Niederrhein. Naturf. Gesell. in Bonn*, Bd. XXIX. Bonn, 1872.
- RATH (VOM) G. — Ueber einem merkwürdigen Lavablock des Vesuv. — *Sitz. der Niederrhein Gesell. in Bonn*. Bd. XXIX. Bonn, 1872, — *Report of the Brit. Assoc. for the Advanc. of Sc. London*, 1872. *Ann. Phys. und Chemie. Leipzig*, pp. 562-568.
- RATH (VOM) G. — Der Aetna und der Vesuv. — *Bonn*, 1872-73, 2 Vols, figs.
- RATH (VOM) G. — Der Vesuv. Eine geologische Skizze. — *Berlin*, 1873, in 8°, pp. 53, pl. 2. (C. A.).

- RATH (VOM) G. — Geognostische mineralogische Fragmente aus Italien. XI. Ein Beitrag zur Kenntniss des Vesuv's. — *Zeitschr. d. Deut. Geol. Gesell. Bd. XXV. Berlin, 1873.*
- RATH (VOM) G. — On a Remarkable block of lava of the great Eruption of Vesuvius of April 1872. — *Reports 42nd Meet. of the Brit. Assoc. London, 1873.*
- RATH (VOM) G. — Ueber den angeblichen Epidot vom Vesuv. — *Ann. der Phys. und Chemie, Bd. VI. Ergänz. Leipzig, 1873.*
- RATH (VOM) G. — Ueber die chemische Zusammensetzung der durch Sublimation in Vesuvischen Auswürflingen gebildeten Krystalle von Augit und Hornblende. — *Ann. der Phys. und Chemie, Suppl. Bd. VI. Leipzig, 1873.*
- RATH (VOM) G. — Ueber die Glimmerkrystalle vom Vesuv. — *Ann. der Phys. und Chemie. Bd. VI. Ergänz. Leipzig, 1873.*
- RATH (VOM) G. — Ueber die verschiedenen Formen der Vesuvischen Augite. — *Ann. der Phys. und Chemie, Bd. VI. Ergänz. Leipzig, 1873.*
- RATH (VOM) G. — Ueber die chemische Zusammensetzung des gelben Augits vom Vesuv. — *Monatatsb d. K. Ak. der Wissensch. Berlin, 25 Juli, 1875.*
- RATH (VOM) F. — Ueber die oktaëdrischen Krystalle des Eisenglanzes vom Vesuv, über die Verwachsungen von Biotit, Augit und Hornblende mit grösseren Augitkrystallen vom Vesuv und über Augit von Traversella. Brief an Prof. Leonhard. — *Neue Jahrb. für Min. Geol. und Pal. Bd. IV. Stuttgart, 1876.*
- RATH (VOM) G. — Ueber die sogenannten oktaëdrischen Krystalle des Eisenglanzes vom Vesuv. — *Verh. des Naturh. Ver. d. Preuss. Rheinl. und Westph. Bd. XXXIV. Bonn, 1877.*
- RATH (VOM) G. — Ueber einige durch vulkanische Dämpfe gebildete Mineralien des Vesuv. — *Verh. d. Naturh. Ver. d. Preuss. Rheinl. und Westph. Bd. XXXIV. Bonn, 1877.*
- RATH (VOM) G. — Orthit von Auerbac, calcit von Lancashire, Danburit von Russel, St. Lawrence Co. N. Y. und cuspidin-ähnliches Mineral vom Vesuv, — *Sitz. Ber. d. Niederrhein Ges. f. Natur- und Heilkunde. 3 Jan. und 7 Febr. 1881.*
- RATH (VOM) G. — Mineralien von Monteponi und Monteverchio auf Sardinien-Vesuvische Mineralien. — Ueber den Zustand des Vesuvs im December 1886. — Ueber die Tuffbrüche von Nocera. — *Sitz. Ber. d. Niederrhein. Ges. f. Natur und Heilkunde, 6 Juni. Bonn, 1887.*
- RAZZANTI F. — Récit véritable d'un misérable et mémorable accident arrivé en la descente de la très renommée Montagne de Somma autrement le Vésuve environ trois lieues loin de

- la ville de Naples depuis le Lundy 15 Décembre 1631 sur les neuf heure du soir jusque au Mardi suivant 23 du mesme, par un Observantin reformé du Couvent Royal de Naples. — *Ext. du Mercure François, 1631, 2^{me} partie, pp. 67-73, in 8.°, 1632, pp. 478-480, fol. 11. (C. A.).*
- RECUPITO G. C. — De Vesuviano incendio nuntius. — *Neapoli, 1632, in 4.°, fol. 4.°, pp. 120. Also, 1633, in 8.°, pp. 124. (C. A.) — Mediolani, 1633, in 4.°, fol. 4, pp. 114, fol. 3. — Piclavis, 1636, in 12.°, fol. 3, pp. 195. — Lovanii, 1639, in 8.°, pp. 180, index. — Romae, 1644, in 4.°, pp. 140, fol. 5 — Romae, 1670, in 8.°, pp. 140.*
- RECUPITO G. C. — Avviso dell' incendio del Vesuvio, tradotto dalla lingua latina in italiana. — *Napoli, 1635, in 8.°, fol. pp. 264.*
- REGNAULT H. — Ascension au Vésuve, le 10 Janvier 1868. — *Compt. Rend. d. l'Acad. d. Sc. Vol. LXVI. Paris, 1868, pp. 166-169.*
- REQUIER. — Recueil général, historique, et critique de tout ce qui a été publié de plus rare sur la ville d'Hercolane. — *Paris, 1754, pp. 135, in 4.°. (C. A.).*
- REYNAUD J. D. — On the ancient and present state of Vesuvius (1831). — *Proceed. of the Geol. Soc. of London. Vol. I. London, 1834.*
- RICCI G. — Analisi dell' acqua ferrata con un appendice sopra un nuovo liquido vesuviano. — *Giornale Enciclopedico, 1820, in 8.°, fol 9. (O. V.).*
- RICCI G. — Analisi dell'acqua termo-minerale della Torre dell'Annunziata. — *Napoli, 1831, in 4.°, pp. 32. (C. A.).*
- RICCI G. — Raccolta di osservazioni sull'uso dell'acqua termo-minerale Vesuviana e Nunziante. — *Napoli, 1833-34, in 8.°, Vol. I, pp. 76, maps 1. Vol. II, pp. XXXIX + X + 145, maps 1, pl. 1. (C. A.).*
- RICCI G. — Analisi dell'acqua termo-minerale Vesuviana-Nunziante. — *Napoli, 1834, in 8.°, pp. 49.*
- RICCIO L. — Prodigiosi portenti del Monte Vesuvio. Invettiva di Camillo Tuttini contro gli Spagnuoli, in occasione dell'incendio dell'anno 1649. E note riguardanti quella eruzione. — *Archiv. Storico per le Prov. Napoli, Anno II, Fasc. I, 1887, pp. 28. (C. A.).*
- RICCIO L. — Un altro documento sulla eruzione del Vesuvio del 1649. — *(Lo Spettatore del Vesuvio e dei Campi Flegrei. Nuova serie, Vol. 1.°). — Napoli, 1887, in 4.°, pp. 61-64.*
- RICCIO L. — Nuovi documenti sull'incendio vesuviano dell'anno 1631 e bibliografia di quella eruzione. — *Archiv. Stor. p. 1.*

- Province Napolitane, An. XIV., fasc. III. Napoli, 1889, in 8°, pp. 69.*
- RISO B. (DE). — Relazione della pioggia di cenere avvenuta in Calabria ulteriore nel dì 27 Marzo 1809. — *Atti Accad. Pontaniana, T. I., Napoli, pp. 163-165.* (O. V..)
- RISSLER J. B. — Neuer Ausbruch des Vesuv. Ein feuerspeihender Berg des Königreichs Neapel in der Nähe von dessen Hauptstadt — *Mülhaussen, gedruckt bei J. B. Rissler 1855, in 4°, pp. 8.* (C. A.).
- RIVINUS A. (BACHMANN). — Vesuvius, in promotione Batalorium VI idus Martii MDCXXXII, Lipsiae, declamatus, — *Lipsiae, 1632, in 4°, fol. 22.* (C. A.).
- RIVINUS A. — Tripus Delphichus de Monte Campaniac Somma ejusque fatitidico incendio. — *Lipsiae, 1635, in 4°, See Soria.*
- R.*** L.***. — *See Liberatore. L.*
- ROCCA ROMANA. — Cratere del Vesuvio. — ?, 1805, *pl. in fol.* (O. V.).
- ROCCA F. — Osservazioni (sull'acqua Vesuviana-Nunziante). — *See Ricci G.*
- ROCCO A. — Lettera, nella quale si dà vera, e minuta relatione delle Gratie fatte dalla Gloriorissima Vergine e Madre di Dio dell'Arco Maggiore a beneficio della sua Casa e della Gente, che in essa si salvò in questi travagliati tempi del nuovo incendio del Monte Vesuvio nel 1631, e della carità usatali dai Padri dell' Arco. — *Napoli, 1632, in 8°, pp. 40.* (C. A.).
- ROCCO A. — Oratione devotissima alla Gloriosa Vergine Maria dell' Arco. (Descript. of erupt. 1631.) — *Napoli, 1632, in 8°. Frotisp. wanting.* (B. N.).
- RODWELL G. F. — La récente éruption du Vésuve et son état actuel. — *La Nature. Paris, 8 Mars 1879. — In English: Nature. London, February, 1879. The Academy, Feb. 15th, 1879, N.° 354, pp. 149.*
- ROMANELLI A. D. — Viaggio a Pompei, a Pesto, e di ritorno ad Ercolano ed a Pozzuoli. — *Napoli, 1817, in 12°. Vol. I, pp. 288, pl. 11, Vol. II, pp. 35+275, pl. 3. See pp. 53-63.* (C. A.).
- ROSE G. — Abhandlung des Herrn C. Rammelsberg über die chemische Zusammensetzung des Condrodits, Humits und Olivins, etc. — ?, (1851), *in 8°, fol. 3.* (O. V.).
- ROSINI C. — Dissertationis isagocicae ad Herculaneisium volumen explanationem. Pars prima (alone published)—*Neapoli, 1797, in fol., fol. 3, pp. 104, maps 2, pl. XX.* (C. A.).
- ROSSI M. S. — Intorno ai fenomeni concomitanti l'ultima eruzione vesuviana, avvenuti nella zona vulcanica dell'Italia. —

- Atti d. Acc. Pont. d. N. Lincet. An. XXV, Sess. VI, del 26 Maggio 1872, in 4°, pp. 7. (C. A.).*
- ROSSI (DE) M. S. — Studii intorno al terremoto che devastò Pompei nell'anno 62 e ad un basso rilievo votivo pompeiano che lo rappresenta. — *Boll. d. Vulc. Ital. Fasc. VIII. XI. Ann. VI. Roma, 1879.*
- ROTH J. — Analysen: I—Dolomitischer Kalkstein, sogenannter Auswürfling vom Rio della Quaglia von der Somma. — II—Dolomitischer Kalkstein von der Punta delle Coglione an der Somma. — III—Stängliger Braunspath aus Mexico. — IV—Kluftgestein aus dem Gypse des Schildsteins bei Lüneburg. — V—Stinkstein von Segeberg. — *Zeitschr. d. Deuts. Geol. Gesell. Bd. IV. Berlin, 1852. — Journ. für prakt. Ch. Bd. LVIII. Leipzig, 1853.*
- ROTH J. — Der Vesuv und die Umgebung von Neapel. — *Berlin, 1857, in 8°, pp. XLIV+540, pl. IX, figs.*
- ROTH J. — Litteratur über den Vesuv, besonders der Ausbrüche. — *Berlin, 1857, in 8°, pp. 98. (C. A.).*
- ROTH J. — Ueber den Ausbruch des Vesuv vom Jahre 1861. — *Zeitschr. der Deut. Geol. Gesell. Bd. XV. Berlin, 1863.*
- ROTH J. — Geschichte des Vesuvs. — *Berlin, 1869.*
- ROTH J. — Ueber Vesuv und Aetnalaven. — *Zeitschr. d. Deut. Geol. Gesell. Bd. XXV. Berlin, 1873.*
- ROTH J. — Ueber eine neue Berechnung der Quantitäten der Gemengtheile in den Vesuvlaven. — *Zeitschr. der Deut. Geol. Gesell. Bd. XXVIII. Berlin, 1876.*
- ROTH J. — Studien am Monte Somma. — *Abhandl. der Kön. Ak. der Wissensch. Berlin, 1877. — Abstract in Italian: Boll. d. R. Com. Geol. d' Italia, N. 11-12. Roma, 1877.*
- ROTH J. — Ueber die Gänge des Monte Somma. — *Monatsb. der K. preuss. Ak. der Wissensch. Berlin, 1877.*
- ROTH H. — 1880. — *See Guiscardi,*
- ROTH J. — Zur Geologie der Umgebung von Neapel. — *Gesammtsitz. Akad. Berlin, 10 Nov. 1881, pp. 990-1006. (C. A.).*
- ROZEL. — Sur les volcans des environs de Naples. — *Bull. d. l. Soc. Géol. d. France, Vol. I. Paris, 1843-44.*
- RUGGIERO M. — Sopra una massa di pomici trovata in Pompei, con una lettera del Prof. Scacchi. — *Napoli, 1877, in 4°, pl. 1.*
- RUGGIERO M. — Della eruzione del Vesuvio nell'anno LXXIX. — *Napoli, 1879.*
- RUIZ DE ALARCON Y MENDOÇA J. — Al Bolcan y incendios del Vesuvio. Sonetto — *See de Quinones. (C. A.).*
- SACCO G. — Ragguaglio storico della calata nel Vesuvio e rela-

- zione del suo stato dei 16 Luglio 1794. — *Portici, 1794, in 8º, pp. 14.*
- S. A. F. — Relazione dell'ultima eruzione del Vesuvio accaduta in Agosto di quest'anno, secondo le osservazioni del S. A. F. — *Giornale Enciclopedico d'Italia, Napoli, 1787, in 8º. (B. N.).*
- SALIS-MESSIA (DE) J. — Sonetto — *See De Quinones.*
- SALMON. — Descrizione del Monte Vesuvio. Included in the Storia del Regno di Napoli. — *Napoli, 1763, in 8º, pp. 65-79, (B. N.).*
- SALVADORI G. B. — Notizie sopra il Vesuvio e l'eruzione dell'Ottobre 1822. — *Napoli, 1823.*
- SALVADORI G. B. — Notizen über den Vesuv, und dessen Eruption. v. 22 Oct. 1822 verdeutcht durch C. F. C. H. — *Neapel, 1823, in 4º, pp. 75, pl. 3. (C. A.).*
- SAMBIASI O. — Sonetto, (1631). — *See G. Urbano. (C. A.).*
- SANCHEZ G. — Il Monte Vesuvio deificato. — *Il Progresso delle Scienze, etc. Vol XII. Napoli, 1835, in 8º, pp. 145-149. (C. A.).*
- SANCTIS (DE) A. — Il mostruoso parto del Monte Vesevo hora dal volgo detto, Monte Diavolo la cui mostruosità e crudeltà è qui descritta. — *Napoli, 1632, in 12º.*
- SANCTIS (DE) A. — *See Genovesi Ab.*
- SANDRANT J. — Wartsaffte Contrafactur des Bergs Vesuvii, und desselbigen Brandt sambt des umbligenden gelegenheit nach dem leben gezeichnet. — *?, 1631, a plate in 4º. (C. A.).*
- SANDULLI P. — Gli Eroi del Virginiano celebrati con epistole, idilli, ed altre rime eroiche sagre. — *Napoli, 1708, in 8º, p. 134. From. pp. 60 to 65: Il Vesuvio a posteri.*
- SANFELICE A. — Campania. — *Amstelaedami, 1656, in 12º, fol. 3, pp. 64, pl. 1, frontisp. (C. A.).*
- SANFELICE A. — Campania notis illustrata. — *Neapoli, 1722, in 4º, pp. 13 + 256, pl. 1. (C. A.).*
- SANFELICE A. — La Campana recata in volgare italiano da Girolamo Aquino Capuano. — *Napoli, 1779, in 8º, pp. LXXI + 117. pl. 1, portrait. (C. A.). Also 1796, with map.*
- SAN MARTIN A. — Un viaje al Vesubio. Novità originale, storica. — *Madrid, 1880, in 8º, pp. 236. (C. A.).*
- SANNICOLA G. — Biografia di Nicola Covelli. — *Palermo, 1845, in 8º, p. 16. Another edition with portrait. Napoli, 1846, in 8º, p. 19.*
- SANTA MARIA (AGNELLO DI). — Trattato scientifico delle cause che concorsero al fuoco ed al Terremoto del Monte Vesuvio vicino Napoli. — *Napoli, 1632, in 8º, pp. 100.*
- SANTA MARIA ANDREA — Sonetti tre (1631). — *See G. Urbano.*

- SANTARELLI A. — Discorsi della natura, accidenti e pronostici dell'incendio del Monte di Somma nell'anno 1631. — *Napoli*, 1632, in 4°, fol. 2, pp. 58. (C. A.).
- SANTELET DE LAGRAVIERE M. — Étude sur les pierres précieuses suivie de l'Eruption du Vésuve en 1872. — *Avellino*, 1876, in 8°, pp. 74, *Maps*, 2. (C. A.).
- SANTELIA A. — Contentio inter Coridonem Partenopeum et Moe-ridem ex Septentrione. An Vesuvius Neapolitanis deliciis obstat, an vero sit emolumento. Egloga. — *M. S. in fol. (small)*, *About 1681*. (C. A.).
- SANTOLINI G. M. — Egloga in lode di S. Gennaro difensore contro l'incendio vesuviano. At p. 55 of a work entit. "Carmina Latina et Italica". — *Neapoli*, 1784, in 4°, fol 8, pp. 112, *portrait*. (O. V.).
- SANTOLI V. M. — De Mephiti et vallibus Auxanti, libri 3. Cum observationibus super nonnullis urbibus Hirpinorum, quorum lapides et antiquitatum reliquiae illustr. — *Napoli*, 1783, in *fol.*, *pl. 6*.
- SANTOLI V. M. — Narrazione de' fenomeni osservati, sul suolo Irpino contemporanei all'ultimo incendio del Vesuvio accaduto a Giugno di questo anno 1794. — *Napoli*, 1795, in 8°, pp. VII+160, *pl. 1*, *figs*.
- SANZMORENO F. — Ampla, copiosa y verdadera Relacion dell' incendio della montana de Soma o Vesubio, etc. — *Napoles*, 1632, in 4°. *fol. 8*, pp. 80.
- SARACINELLI M. — Guerra della Montagna o sia eruzione del Vesuvio del dì 24 Agosto 1834. — *Loose sheet in fol.* (C. A.).
- SARNELLI P. — La vera guida de' forestieri curiosi di vedere, e d'intendere le cose più notabili della Real Città di Napoli, e del suo amenissimo distretto, etc. — *Napoli*, 1752, in 12°, pp. 302. 2nd *edit*, 1788, in 12°, pp. VIII+396, *pl. 13*. See pp. 337-356, and *pl. 13*.
- SARNELLI P. — Nova guida de' forastieri e dell'istoria di Napoli. — *Napoli*, 1791, in 12, *fol. 1*, pp. 394, *pl. 10*, *figs*. (O. V.).
- SASSO C. N. — Il Vesuvio, Ercolano e Pompei, con una pianta geometrica della città di Pompei e con l'indicazione di quanto ivi si è rinvenuto sino a tutto il 1855. — *Storia dei Monumenti di Napoli*. *Napoli*, 1857, in 8°, *Fasc. 16, 17, 18*, pp. 60, *pl. 1*. (C. A.).
- SASSONE A. F. — Sonetto (1631). — See *G. Urbano*. (C. A.).
- SAUSSURE (DE) H. — Sur l'éruption du Vésuve en Avril 1872. — *Compt. Rend. d. l'Acad. d. Sc. Vol. LXXIV. Paris*, 1872.

- SAUSSURE (DE) H. — La dernière éruption du Vésuve en 1872. — *Act. d. l. Soc. Elvét. d. Sc. Nat. Vol. LV. Fribourg, 1873.*
- SAUSSURE (NECKER DE) L. A. — Description du cône du Vésuve le 15 Avril 1820. — *Bibl. Univ. d. Sc. etc. Vol. XXIII. 1^{re} Sér. Genève, 1823.*
- SAUSSURE (NECKER DE) L. A. — Mémoires sur le mont Somma, (1822). — *Mém. d. l. Soc. d. Phys. et d'Hist. Nat. de Genève, Vol. II. Genève, 1823. — Elberfeld, 1825.*
- SAUSSURE (NECKER DE). — 1825. — *V. Raffles.*
- SAVARESE A. — Lettera seconda sui vulcani. — *Napoli ? , Nov. 1798, in 8^o, fol. 16. (O. V.).*
- SAVARESE A. — Lettera sui vulcani al Sig. Gugl. Thomson. — *Giornale Letterario di Napoli, April, 1798, in 8^o, fol. 12. (O. V.).*
- SAVARESE. — Trones d'arbres trouvés à Pompei. — *Feuilleton de la Presse, 19 mai 1860 (C. A.).*
- SAVASTANO G. — Acqua termo-minerale Vesuviana-Nunziante. — *See Ricci.*
- SCACCHI A. — Della perielasia, nuova specie di minerale del Monte Somma. — *Mem. Mineral. Napoli, 1841, pp. 16. Ann. d. Mines. 4^{me}, Sér. Vol. III, Paris, 1843, pp. 369-384. In German, München Gelehrte Anz. XVI, 1843, pp. 345-348. Erdm. Journal für prakt. Chemie, XXVIII, 1843, pp. 486-489. Atti R. Acc. Sc. Fis. Mat. Napoli, 1850.*
- SCACCHI A. — Esame cristallografico del ferro oligisto e del ferro ossidulato del Vesuvio. — *Napoli, 1842, in 8^o, pp. 34, figs.*
- SCACCHI A. — Notizie geologiche e conchiliologiche ricavate da una lettera del Dr. R. A. Philippi ad A. Scacchi. — *Rend. R. Accad. Fis. Mat. Vol. I, Napoli, 1842, pp. 86-88 (186-188.)*
- SCACCHI A. — Sulle forme cristalline della Sommite. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. Vol. I. Napoli, 1842, pp. 129-131.*
- SCACCHI A. — Lezioni di Geologia. — *Napoli, 1843, in 8^o. pp. 153-174 (C. A.).*
- SCACCHI A. — Osservazioni critiche sulla maniera come fu seppellita l' antica Pompei. — *Napoli, 1843, in 8^o, Bull. Archeol. Nap. An. I, N. 6, marzo 1843, pp. 41-45. (C. A.).*
- SCACCHI A. — Notizie geologiche dei Vulcani della Campania estratte dalle Lezioni di Geologia. — *Napoli, 1844. in 8^o*
- SCACCHI A. — Campi ed Isole Flegree, Vesuvio. Specie oritognostiche del Vesuvio e del Monte Somma. — *See: Napoli ed i Luoghi Celebri delle sue Vicinanze, Vol. II, Napoli, 1845, in 4^o, pp. 361-413.*
- SCACCHI A. — Istoria delle eruzioni del Vesuvio accompagnata

- dalla bibliografia delle opere scritte su questo Vulcano. — *Il Pontano*, Vol. I, Napoli, 1847, in 4°, pp. 16-21 and 106-131.
- SCACCHI A. — Notice sur le gisement et sur la cristallisation de la sodalite des environs de Naples. — *Ann. des Mines*, 4.^{me} Sér. T. XII, Paris, 1847, pp. 385-389, figs. 11-14 of pl. 3.
- SCACCHI A. — Notizie su l'ultima eruzione del Vesuvio, composizione della lave, delle cenere, de' lapilli, emanazioni gassose, etc. — *Il Propagatore delle Scienze Naturali, etc. Napoli*, 1847, in 4, pp. VIII + 416, pl. 4, See pp. 150-184.
- SCACCHI A. — Sopra una straordinaria eruzione di cristalli di Leucite. — *Racc. d. Lett. etc. intorno alla Fis. ed alla Mat.* Vol. I, Roma, 1845, and *Ann. Civ. del Regno di Napoli*, Vol. XLVI, fasc. LXXXVII, 1847, pp. 62-66, (C. A.). *Raccolta Scient. An. I*, 1845, pp. 185-189, pl. 1.
- SCACCHI A. — Relazione dell'incendio accaduto nel Vesuvio nel mese di febbraio del 1850, seguita dai giornalieri cambiamenti osservati in questo vulcano dal 1840 sinora. — *Rend. d. R. Acc. d. Sc. Fis. e Mat.* Vol. IX, Napoli, 1850, pp. 13-48, pl. 3, *Ann. d. Mines*, 4.^{me} Sér. Vol. XVII, Paris, 1850, in 8°, pp. 323-380. pl. 4.
- SCACCHI A. — Della Humite e del Peridoto del Vesuvio (1850). — *Atti d. R. Acc. d. Sc. e Lett.* Vol. VI, Napoli 1851, pp. 241-273, pl. 1. *Journ. für Prakt. Chemie*, Bd. LIII, Leipzig, 1851. pp. 156-160. — *The American Journ. of Sc. and Arts*, Vol. XIV. New-Haven, 1852, pp. 175-182, *Annal. der Phys. und d. Chemie, Ergänzungs*, Bd. III, Leipzig, 1853, fol. 14, pl. 1. *Atti R. Accad. Sc. Napoli*, Vol. VI, 1852.
- SCACCHI A. — Sopra le specie di Silicati del Monte di Somma e del Vesuvio le quali in taluni casi sono state prodotte per effetto di sublimazioni. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. N. S., An. I*, Napoli, 1852, pp. 104-112.
- SCACCHI A. — Notiz über den Sommit, Mizzonit und Mejonit, — *Poggend. Ann. Ergänz. Bd. III*, 1853, pp. 478-479, fig. 16-18 of pl. 2.
- SCACCHI A. — Uebersicht der Mineralien, welche unter den unbezweifelten Auswürflingen des Vesuvus und des Monte di Somma bis jetzt mit Bestimmtheit erkannt worden sind. — *Neues Jahrb. für Mineral. Geol. u. Pal. Stuttgart*, 1853, pp. 257-263.
- SCACCHI A. — Memoria sull'incendio vesuviano del mese di maggio 1855. — *V. Guarini e Palmieri*.
- SCACCHI A. — Sur la dernière éruption du Vésuve. — *Bull. d. l. Soc. Géol. de France. Vol. XV*, Paris, 1857-58.

- SCACCHI A. — Dell' eriocaleo e del melanotallo nuove specie di minerali del Vesuvio. — *Rend. d. Acc. d. Sc. Fis. e Mat. An. IX, Napoli, 1870, pp. 86-89.*
- SCACCHI A. — Note mineralogiche, Memoria Prima. Leucite del Monte Somma metamorfizzato, etc. Cristalli geminati di ortosia di Monte Somma, etc. — *Atti d. R. Acc. d. Sc. Napoli, Vol. V, 1870, pp. 40, pl. 1 (C. A.).*
- SCACCHI A. — Durch sublimationem entstandene Mineralien bei dem Vesuvausbruch im april 1872. — *Zeitschr. d. Deut. Geol. Gesell. Bd. XXIV, Berlin, 1872.*
- SCACCHI A. — Notizie preliminari di alcune specie mineralogiche rinvenute nel Vesuvio dopo l'incendio di aprile 1872. — *Rend. d. R. Acc. d. Sc. fis. e mat. An. XI Napoli, 1872 pp. 210-213 Zeitschr. d. Deut. Geol. Gesell. Bd. XXIV, Berlin, 1872, pp. 505-506.*
- SCACCHI A. — Sopra l'eruzione di ceneri vulcaniche avvenuta nell'aprile 1872. — *Rend. d. R. Accad. d. Sc. Fis. e Mat. Napoli, 1872.*
- SCACCHI A. — Sulla origine della cenere vulcanica. — *Rend. R. Accad. Sc. Fis. Mat. Napoli, 1872. Zeitschr. d. Deut. Geol. Gesell. Bd. XXIV, Berlin, 1872.*
- SCACCHI A. — Contribuzioni mineralogiche per servire alla storia dell'incendio Vesuviano del mese di aprile 1872. Napoli, 1872 — *Atti d. R. Acc. d. Sc. Vol. V, Napoli, 1872, pl. 1. Zeitsch. der deutsch geol. gesells. Bd. XXIV, 1872, pp. 493-504. Idem Part. 2.^a Napoli, 1873. Atti d. R. Acc. d. Sc. Vol. VI, Napoli 1873, pl. 4.*
- SCACCHI A. — 1^a e 2^a appendice alle contribuzioni mineralogiche sull'incendio Vesuviano del 1872. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. An. XIII, Napoli, 1874, pp. 179-180, and An. XIV, pp. 77-79.*
- SCACCHI A. — Della Cuspidina e del Neocrisolito, nuovi minerali vesuviani. — *Napoli, Rend. R. Accad. Sc. Fis. Mat. An. XIV, 1876, pp. 208-209. Zeitschr. f. Kryst. und Miner. P. Groth, Bd. 1, Leipzig, 1877, pp. 398-399, figs. 2.*
- SCACCHI A. — Microsommite del monte Somma. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. An. X, Napoli, 1876 pp. 3, 27-69, fig. 1.*
- SCACCHI A. — Sulla regolare scambievole posizione dei cristalli di olivina congiunti a quelli di Humite e dei cristalli di oligisto congiunti a quelli di magnetite. — *Lettera al Prof. vom Rath (versione tedesca). Neues Jahrbuch für Mineralogie etc. 1876 pag. 637. fig.*

- SCACCHI A. — Dell' Anglesite rinvenuta sulle lave vesuviane. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. An. XVI, Napoli, 1877, pp. 226-230.*
- SCACCHI A. — Sopra un masso di pomici saldate per fusione trovato a Pompei. — *Atti d. R. Accad. Archeol. Lettere e Bel. Arti, Vol. VIII, Napoli, 1877 in 4°, pp. 199-207, pl. 1, Map. 1. (C. A.).*
- SCACCHI A. — 1877. — *See Ruggiero M.*
- SCACCHI A. — Le case fulminate di Pompei. — *Pompei e la Regione sotterrate dal Vesuvio nell'anno LXXIX. — Napoli, 1879, in fol. pp. 117-129, col. pl. 3. (C. A.).*
- SCACCHI A. — Ricerche chimiche sulle incrostazioni gialle della lava vesuviana del 1631. — *Atti d. R. Acc. d. Sc. Fis. e Mat. Vol. VIII, Napoli, 1879, pp. 19.*
- SCACCHI A. — Le incrostazioni gialle della lava vesuviana del 1631. Risposta di A. Scacchi ad una domanda rivoltagli dal Collega A. Costa. — *Rendiconto della R. Accad. delle Scienze Fis. e Mat. An. XIX, Napoli, Aprile, 1880, pp. 40-41.*
- SCACCHI A. — Nuovi sublimati del cratere vesuviano trovati nel mese di ottobre del 1880. — *Atti d. R. Acc. d. Sc. Fis. Mat. Vol. IX. Napoli, 1881. p. 4, fig. 1.*
- SCACCHI A. — Breve notizia dei vulcani fluoriferi della Campania. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. di Napoli. Ottobre 1882:*
- SCACCHI A. — Della silice rinvenuta nel cratere vesuviano nel mese di Aprile del 1882. — *Rend. d. R. Acc. d. Sc. Fis. Mat. An. XXI, Napoli, 1882, pp. 176-182.*
- SCACCHI A. — Della lava Vesuviana dell'anno 1631. Memoria prima. — *Mem. Soc. It. d. Sc. (detta dei XL), Ser. 3ª, Vol. IV, N.º 8, Napoli, 1883, in 4º, pl. 4.*
- SCACCHI A. — Sopra un frammento di antica roccia vulcanica involuppato nella lava vesuviana del 1872. — *Atti R. Acc. Sc. Fis. e Mat. di Napoli; serie 2ª, vol. I, Napoli, 1883, pl. 1.*
- SCACCHI A. — Le eruzioni polverose e filamentose dei Vulcani. — *Atti R. Accad. Sc. Fis. Mat. Napoli, Ser. 2ª, Vol. II, 1886.*
- SCACCHI A. — Catalogo dei minerali vesuviani con la notizia della loro composizione e del loro giacimento. — *Lo Spettatore del Vesuvio e dei Campi Flegrei, N. serie Vol. 1º, Napoli, 1887, pp. 13.*
- SCACCHI A. — Catalogo dei minerali e delle rocce vesuviane per servire alla storia del Vesuvio ed al commercio dei suoi prodotti. — *Atti R. Ist. d' Incoraggiamento di Napoli, 1888, 4ª Ser. Vol. I, pp. 57, pl. 4. Riv. di Mineral. e Cristall. Ital. Vol. V, Padova, 1889, pp. 84-87, pl. 4.*

- SCACCHI A. — Katalog der vesuvischen Mineralien mit Angabe ihrer Zusammensetzung und ihres Vorkommens. — *Neues Jahrbuch für Mineralogie, etc.*, B. II, 2^a H. Stuttgart, 1888, pp. 123-141. *Riv. di Mineral. e Cristall. Ital.* Vol. III, Padova, 1888, pp. 58-73.
- SCACCHI A. — Appendice alla prima memoria sulla lava vesuviana del 1631. — *Mem. Soc. Ital. d. Sc.*, 1889, Vol. VII, ser. 3.^a N. 7, pp. 26, pl. 1.
- SCACCHI A. — I progetti agglutinanti dell'incendio vesuviano del 1631. — *Rend. R. Acc. Sc. Fis. Mat. Ser. 2^a, An. XXVIII*, fasc. 10^o, Napoli, 1889, pp. 220-225.
- SCACCHI E. — Dei lapilli azzurri trovati nel cratere del Vesuvio nel mese di giugno del 1873. — *Rend. d. R. Acc. d. Sc.* 1880, pp. 7.
- SCACCHI E. — Notizie cristallografiche sulla Humite del M. Somma. — *Rend. R. Acc. d. Sc. Fis. e Mat. Napoli*, 1883, pp. 9.
- SCACCHI E. — Facellite, nuovo minerale del Monte Somma. — *Rend. R. Acc. Sc. Fis. Mat. Napoli, Ser. 2^a, Vol. II* N. 12.
- SCACCHI E. — Contribuzioni mineralogiche: Memoria quarta. — *Rend. R. Acc. Sc. Fis. e Mat. Ser. 2^a, Vol. II*, n.^o 12 Napoli, 1888.
- SCHAFHAEUTL D. — Aufsatz über den gegenwärtigen Zustand des Vesuvs und sein Verhältniss zu den phlegräischen Gefilden. — *Gel. Anz.; herausgeg. v. Mitgl. d. Königl. Bayer. Akad. d. Wiss. Bd. XX München*, 1845. (C. A.).
- SCHIAVONI F. — Osservazioni geodetiche sul Vesuvio. — *Atti d. Soc. Pontan. di Napoli. Napoli*, 1855, in 8^o. pp. 5, pl. 1. *Annali Sci. Giorn. Sc. Fis. Mat. Agric. etc. Vol. II. Napoli*, 1855, pp. 418-422. *Naples*, 1872, pl. 1, in 8^o, pp. 6 with plates.
- SCHMIDT J. — Die Eruption des Vesuvs im Mai 1855 — Nebst Beiträgen zur Topographie des Vesuvs, der Phlegräischen Orater, Roccamonfinas und der alten Vulkane im Kirchenstaate. — *Wien, und Olmütz*, 1856, in 8^o, pp. 12+213, with figs. (C. A.).
- SCHMIDT J. — Neue Höhen — Bestimmungen am Vesuv, im den phlegräischen Feldern, zu Roccamonfina und in Albaner gebirge. — *Wien*, 1856, in 4^o, pp. 41. (C. A.).
- SCHMIDT J. F. J. — Die Eruption des Vesuv ihren Phaenomenen in Mai 1855, nebst Beiträgen zur Topographie des Vesuvs und anderer italiänischen Kratern. — *Olmütz*, 1856, in fol. *Atlas*, pp. 24. in 4^o, pl. 9, *Atlas*. (O. V.). *Mittheil. auf dem Gesammt. der Geogr. von Dr. Petermann, Gotha*, 1856.

- SCHMIDT J. F. — Vulkanstudien. Santorin 1866-1872, Vesuv, Baejae, Stromboli, Aetna 1870. — *Leipzig*, 1874-78, in 8°, fol. 4, pp. 235. map. 1, col. pl. 7., fig. 13. (C. A.).
- SCHNETZER C. — Sur l'éruption du Vésuve du 22 Octobre 1822. (traduction). — *Bull. d. Sc. Nat. et d. Géol. Vol. I. Paris*, 1824.
- SCHOOK M. — De Vesuvio ardente disputationes (1631). — *See Morhof*. (C. A.).
- SCHOTT F. — Visite de Pighius (Etienne) au Vésuve vers 1575. — *Itin. Italiae, Vicentiae 1601*, in 8°, pp. 222-225.
- SCORIGGIO L. — L'incendio del Monte Vesuvio, rappresentazione spirituale, composta da un devoto sacerdote e data in luce da Lazaro Scoriggio. — *Napoli*, 1632, in 12°, pp. 185. (C. A.).
- SCOTTI E. — Ragionamento della eruzione del Vesuvio accaduta il dì 15 giugno 1794. — *Gazzetta (Supplemento) Napolitana Civica, Napoli*, 1794, in 4°, pp. 48. *See also his: Elementi di Fisica*, 1831.
- SCOTTI E. — Lettera a Dom. Cotugno sulla eruzione del Vesuvio del 1804. — *Gazzetta (Supplemento) Napolitana Civica, N. 70, Napoli*, 1804, in 4°, fol. 2.
- SCROPE (POULETT) G. — An account of the eruption of Vesuvius in October 1822. — *The Journ. of Sc. and the Arts. Vol. XV, London*, 1823.
- SCROPE (POULETT) G. — On the volcanic district of Naples. — ?, 1827, in 4°, pp. 16, pl. 1, figs. (O. V.).
- SCROPE (POULETT) G. — Volcanoes. The character of their Phenomena, etc. — *London*, 1862, *Paris*, 1864, *Berlin*, 1872.
- SCROPE (POULETT) G. — Vues du Vésuve et de l'Etna. — ?
- SEMENTINI E GUARINI. — Saggi analitici su talune sostanze vesuviane. — *Rend. R. Acc. d. Sc. Fis. e Mat. Napoli*, 1831, pp. 165-168 (C. A.).
- SEMMOLA E. — Sulle emanazioni aeriformi delle fumarole collocate a diversa distanza dall'attuale bocca d'eruzione del Vesuvio. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. Napoli*, agosto e settembre 1878.
- SEMMOLA E. — Sur l'état actuel du Vésuve. — *Compt. Rend. d. l'Acad. d. Sc. Vol. LXXXVIII, N. 17. Paris*, 1879. *Boll. d. R. Com. Geol. d'Italia, fasc. III-IV. Roma* 1879., *Riv. Scient. Ind. N. 10, Firenze*, 1879. *Rend. R. Accad. Sc. Fis. Mat. Napoli*, 1879, pp. 2.
- SEMMOLA F. — Relazione ragionata dell'analisi chimica delle ceneri vesuviane cruttate nell'ultima deflagrazione de' 16, 17 e 18 giugno dell'anno 1794. — ? in 4°, pp. 15, (C. A.).

- SEMMOLA G. — Del rame ossidato nativo, nuova specie minerale del Vesuvio (Tenorite) Nelle opere minore. — *Napoli, 1845, in 8°, fol. 2, pp. 42-491.*
- SEMMOLA M. — Analisi chimica delle acque potabili dei dintorni del Vesuvio e del Somma. — *Napoli, 1857.*
- SERAIO D. F. — Vesuviani incendii anni 1737 mensis mae Historiarum; curavit Academia Scientiarum neapolitana. — *Neapolis 1738, in 4°, fol. 4, pp. 163, pl. 2, Latin and Italian. Two editions followed by one in 1740, in 8°, pp. 226, pl. 2, fol. 8, (C. A.). Fifth edition, Napoli, 1778, in 4°, fol. 4, pp. 244, pl. 2 (C. A.).*
- SERAIO F. — Histoire du Mont Vésuve avec l'explication des phénomènes qui ont coutume d'accompagner les embrasements de cette montagne. Traduite de l'italien de l'Académie des Sciences de Naples par M. Duperre de Castéra. — *Paris, 1741, in 8°, pp. XX, fol. 2, pp. 362, map, 1, table 1, pl. 2, Another edition in 12°, pp. 361, pl. 1. (C. A.).*
- SERIO. — Ottave sul Vesuvio. — *Napoli, 1775, in 4°, pp. 24. (C. A.).*
- SEVERINO N. — *See Ulloa.*
- S. FR. S. — *See Silvestro F. S.*
- SICA FRA GERONIMO DE GIFONI. — Morale discorso fatto tra l'effeti cagionati dalla voragine del Vesuvio, e li motivi visti nelli Cristiani. — *Napoli, 1632, in small 8°, fol. 8. (C. A.).*
- SICURO F. — Prospetto della Villa del Principe di Aci (oggi Favorita) con veduta del Vesuvio. — *Pl. 2, in largest fol. (O. V.).*
- SIGISMONDO G. — Lettera ad un suo amico di Benevento con la quale gli dà notizia dell'ultima eruzione del Vesuvio seguita nella sera del 15 giugno 1794, e con un confronto della medesima con quella accaduta nel 1631. — *M. S. in (O. V.).*
- SIDERNO D. DA. — Discorso filosofico ed astrologico, nel quale si mostra quanto sia corrosivo il monte Vesuvio dal suo primo Incendio fino al presente, e quanto habbi da durare detto Incendio. — *Napoli, 1632, in 4°, fol. 4. (C. A.).*
- SIEMENS W. — Physikalisch-mechanische Betrachtungen, veranlasst durch einige Beobachtungen der Thätigkeit des Vesuvs im Mai 1878. — *Berlin, 1878.*
- SILLIMAN B. — Miscellaneous notes from Europe. 1. Present condition of Vesuvius. 2. Grotta del Cane and Lake Agnano. 3. Sulphur Lake of Campagna near Tivoli. 4. Meteorological Observatory of mount Vesuvius, etc. — *Am. Journ. of Sc. 2nd Ser. Vol. XII, 1851, pp. 256-260. (C. A.).*

- SILLOS M. — Vesuvius erumpens. Ode. — *In the "Pinacotheca sive Romana pictura et scultura" Romae, 1673, in 8°, pp. 344-346.* (C. A.).
- SILVESTRI O. — Ricerche chimiche sulla eruzione del Vesuvio. — *Atti d. Acc. Gioenia d. Sc. Nat. Ser. 3.^a, Vol. II, Catania, 1868*
- SILVESTRI O. — Sur l'éruption actuelle du Vésuve. — *Compt. Rend. d. l'Acad. d. Sc. Paris, 1868.*
- SILVESTRI O. — Sulla eruzione del Vesuvio incominciata il 12 Nov. 1867. — *Atti d. Acc. Gioenia d. Sc. Nat. Ser. 3.^a Vol. III, Catania, 1869*
- SILVESTRO F. S. — All'inclito Martire S. Giorgio, singolar protettore del Villaggio S. Giorgio a Cremano. Ringraziamento per aver fermato la lava del Vesuvio nella notte del 12 maggio (1855) alle ore 12 p. m. dopo la processione fatta nello stesso giorno. Ode. — *Napoli, 1855, in 8°, pp. 4.* (C. A.).
- SILVEYRA DR. — Sonetto. — *See de Quinones.* (C. A.).
- SINCERO (ACCAD. INSENSATO) — Il Vesuvio fiammeggiante Poema. — *Napoli, 1632, in 8°, fol. 8, pp. 155.* (C. A.).
- SINISCALCO C. — Compendio delle principali eruzioni vesuviane dall'anno 79 E. V. infino alla descrizione delle recenti. — *Napoli, 1863, in 8°, pp. 28. In the text mention is made of plates which were never published* (C. A.).
- SMITHSON J. — On a saline substance of mount Vesuvius. — *Philosph. Transact. of the R. Soc. of London, 1813.*
- SOLIO MESSIA JUAN. — Sonetto. — *See Quinones* (C. A.).
- SORIA F. A. — Scrittori vesuviani. Memorie storico-critiche degli storici napoletani. — *Napoli, 1781, in 4°, pp. 621-641.*
- SORRENTINO I. — Istoria del monte Vesuvio divisa in due libri. — *Napoli, 1734, in 4°, fol. 8, pp. 224, fol. 2.*
- SOTIS B. — Dissertazione fisico-chimica dell'ultima eruzione vesuviana dei 12 agosto 1804. — *Napoli, 1804, in 8°, pp. 55.*
- SOYE L. R. — Ode cantada no felis die natalicio d'Augusta Maria Carolina d'Austria Rainha das Duas Cecílias. — *Napoles, 1792, in 8°, pp. XX, 2, figs.*
- SPALLANZANI L. — Viaggio alle due Sicilia. — *Pavia, 1792-1797, VI Vols, in 8°, pl. 11.*
- SPALLANZANI L. — Lettera nella quale si tratta de' sassi caduti dall'aria nella Campagna Sanese il dì 16 giugno 1794. — *Giorn. Lett. di Napoli, 1793-1798, Vol. XXXI, pp. 81-102.*
- SPALLANZANI L. — Travels in the Two Sicilies and some parts of the Apennines. — *Translated from the Original Italian. 4 vols. with 11 plates, London, 1798.*

- SPALLANZANI L. — Lettera scritta al Wilseck sul fenomeno della pioggia di pietre avvenuta a Siena nel 1794. — *The original M. S. letter presented by Prof. G. Uzielli* (C. A.).
- SPALLANZANI L. — Relation de l'éruption du Vésuve arrivée le 15 Juin 1794. — (?).
- SPINOSA S. — Dichiarazione geneologica fisico chimica naturale apologetica, ed epidemica del Signor Vesuvio. — ?, in 4°. See *Crisippo Vesuvino*.
- STAIBANO V. — Resolutiones forensis (Centuria II, Resolutio CXLIV). — *Napoli, 1654, in fol* (C. A.).
- STAS. — Sur la découverte par le prof. Scacchi, de Naples, d'un corps simple nouveau dans la lave du Vésuve. — *Bull. d. l'Acad. R. d. Sc. de Belgique, 2^e Sér. Vol. XLVI, XLVII, XLVIII, XLIX. N. 1-4, Bruxelles, 1878-80*.
- STILES F. — Eruption of mount Vesuvius on 23 Dicembre, 1760. — *Philosph. Transactions of the R. Soc. of London. Vol. LII, London, 1761*.
- STOPPA G. — Memorie istorico-fisiche sulle eruzioni vesuviane etc. — *Napoli, 1806, in 4°, pp. 92, pl. 1*.
- STOPPANI A. — Osservazioni sulla eruzione vesuviana del 24 aprile 1872. — *Atti d. R. Ist. Lom. d. Sc. e Lett. Ser. 2.^a, part. II, Vol. V, Milano, 1872*.
- STROZZI N. — Sonetto. — See *G. Urbano* (C. A.).
- STRÜVER G. — Sodalite pseudomorfa di Nefelina del monte Somma. — *Atti d. R. Acc. d. Sc. di Torino, Vol. VII, disp. 3.^a 1872*.
- STÜBEL A. — Die Laven des Somma bei Neapel. — *Sitz. Ber. d. Naturwiss. Gesell. Isis. zu Dresden. Dresden, 1861*.
- SUAREZ F. M. — De Monte Vesuvio. — *M. S. Bibl. Brancacciana in 8°, pp. 21. Copy* (C. A.).
- SUPO (Padre Gesuita Matematico et Meteorista, nel collegio di Napoli). — Relation del nuovo incendio del Vesuvio ai 3 di Luglio 1660. — *M. S. in (O. V.)*. (*This determines the authorship of the articles under "Anonymous" referring to this eruption*).
- SUPPLE R. — An account of the Eruption of mount Vesuvius, from its first Begining to the 28 Oct. 1751. — *Philosph Transactions of the R. Soc. of London, Vol. XLVII, London 1751-52, pp. 315-317*.
- SZEMBECH F. — Relazione composta di varie relazioni intorno all'ultimo incendio del Vesuvio. — (*In Polish*) *Cracovia, 1632, in 4°*.
- TADINI CONTE F. — See *T. C. F.* (C. A.).

- TARGIONI TOZZETTI G. — Saggio de' Monti ignovomi della Toscana e del Vesuvio. — *See Anonymous: Dei Vulcani o Monti Ignovomi, etc. 1779.*
- TARI A. — Reliquie di lava sul lido di Resina. — ?, in 12°, fol. 3. (O. V.)
- TARINO G. A. — Continuatione de' successi del prossimo Incendio del Vesuvio, con gli effetti della cenere, e pietre da quello vomitate. e con la dichiarazione, e espressioni delle croci maravigliose apparse in varii luoghi dopo l'incendio. — *Napoli, 1661. in 4°, pl. 1. (B. N.).*
- TATA D. — Descrizione del grande incendio del Vesuvio successo nel giorno 8 Agosto 1779. — *Napoli, 1779, in 8°, pp. 38.*
- TATA D. — Relazione dell'ultima eruzione del Vesuvio accaduta in Agosto di quest'anno. — *Mem. d. R. Acc. d. Sc. Fis. e Mat. Vol. V. Napoli, 1787. (O. V.)*
- TATA D. — Breve relazione dell' ultima eruttazione del Vesuvio. (Agosto e Settembre 1790) etc. — *Napoli, 1790, in 8°, pp. 24.*
- TATA D. — Lettera al Sig. Barbieri sull'eruzione del Vesuvio. — *Napoli, 1794, in 8°, pp. 26.*
- TATA D. — Lettera sulla figura, ecc. del Vesuvio. 21 Agosto 1794. Con breve risposta di F. Viscardi. — ?, 1794.
- TATA D. — Memoria sulla pioggia di pietre, avvenuta nella Campagna Sanese il dì 16 di Giugno di questo corrente anno (1794). — *Napoli, 1794, in 8°, pp. 74.*
- TATA D. — Relazione dell' ultima eruzione del Vesuvio nel 15 Giugno 1794. — *Napoli, 1794, in 8°, pp. 42.*
- TATA D. — Continuazione delle notizie riguardanti il Vesuvio. — ?, in 12°, pp. 24. (C. A.).
- TAYLOR (LE BARON.) — Lettre à M. Charles Nodier sur les villes de Pompéi et d' Herculaneum. — *Nouv. Ann. des Voy. t. XXIV, pp. 424-425, Déc. 1824. (C. A.).*
- T. C. F. (Tadini Conte Franc.). — L'Eruzione del Vesuvio della notte de' 15 giugno 1794, poeticamente descritta. — ? in 8°, pp. 30, pl. 1. (C. A.).
- TCHIHATCHEFF (VON) P. — Lettre sur l'éruption du Vésuve du 1r Mai 1855. — *Compt. Rend. d. l'Ac. d. Sc. Paris 1855. T. XL, pp. 1229-1238.*
- TCHIHATCHEFF (VON) P. — Nouvelle éruption du Vésuve. — *Compt. Rend. d. l'Acad. d. Sc. Vol. LIII, Paris, 1861, pp. 1090-1092 — Zeitschr. d. Deut. Geol. Gesell. Bd. XIII. Berlin, 1861, pp. 453-458.*
- TCHIHATCHEFF (VON) P. — Der Vesuv im Dezember 1861. — *Ver-*

handlungen d. K. K. Geolog. Reichsanstalt. Bd. XII. Wien. 1861-62.

TENORE M. — Relation de l'éruption du Vésuve aux premiers jours de 1839. — *Bull. d. Soc. Géol. de France, Vol. X. Paris, 1839.*

TENORE M. — Congetture sull'abbassamento altra volta avvenuto nel Vesuvio e l'innalzamento avuto luogo successivamente nelle posteriori eruzioni. — *Nota letta nella tornata d. Acc. d. Sc. Napoli, 16 Giugno, 1846. — Ann. Civil. d. Regno d. Due Sicilie. Fasc. LXXIII. Napoli, 1846.*

TENORE M. — Storia del Vesuvio intorno ad un passo del Cosmos concernente l'altezza del Vesuvio. — “ *Il Lucifero* ” N. 36, Vol. IX. Napoli, 1847, in 8°, pp. 6.

TENORE G. — Notizia di una gita al Vesuvio nel giorno 10 Febbraio, 1850. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. Vol. VIII. pp. 379-380, Napoli, 1849. — Ann. d. Fis., Chim. etc. Vol. II. Torino, 1850*

THOMPSON G. — Breve catalogo di alcuni prodotti ritrovati nell'ultima eruzione del Vesuvio. — *Giorn. Lett. Vol. CII. Napoli, 1794.*

THOMPSON G. — Notizia sul marmo bianco del Vesuvio. — *Giorn. Lett. Vol. LXXXIX. Napoli, 1781. In French, 1797, in 8° pp. 5. (O. V.).*

THOMPSON G. — Sur l'origine de l'oxigène nécessaire pour entretenir le feu souterrain du Vésuve. — *Giorn. Lett. Vol. CVI, Napoli, Septembre 1798, pp. 3-46.*

TOMASELLI (AB.). — Ricerche sulla natura e generi delle lave compatte, lettera al sig. Ab. Olivi, e risposta del Sig. Ab. Olivi al Sig. Ab. Tomaselli. — *Giornale Letterario di Napoli per servire di continuazione all'Analisi ragionata de' libri nuovi. — Napoli, 1793-98, vol. 112, in 8°, Vol. I, pp. 85-93.*

TOMMASI (DE) D. — Altro avviso al pubblico sulla nuova analisi delle ceneri eruttate dal Vesuvio ne' dì 16, 17, 18 del corrente mese di giugno 1794. — *Pag. 1, in 4°, (O. V.).*

TOMMASI (DE) D. — Esperienze et osservazioni del sale ammoniaco vesuviano. — *Napoli, 1794, in 8°, pp. 3-15. (C. A.). Also 1794, in 4°, pp. 16. (O. V.).*

TORCIA M. — Relation de la dernière éruption du Vésuve, en août 1779. — *Naples, 1779, in 12°, pp. 135, also in Italian, Napoli, 1779, in 8°, fol. 5, pp. 136, col. pl. 1, fig. (O. V.).*

TORCIA M. — Lettere al Sig. D. Biagio Michitelli Regio Assessore nella Piazza di Longone. — *Napoli, 1795, in 8°, pp. 16. Antologia, Num. XXX, 1796. (B. N.).*

- TORRE DUCA (SENIORE) (DELLA).—Incendio trentesimo del Vesuvio accaduto gli 8 Agosto 1779. — *Napoli, 1779, in 4°, fol. 2 pp. 15.*
- TORRE DUCA (SENIOR) (DELLA). — Estratto dalla prima lettera sulla eruzione del Vesuvio dei 15 giugno 1794. — *Napoli, 1794, in 8°, pp. 8. (C. A.).*
- TORRE DUCA (DELLA). — Breve descrizione dei principali incendi del monte Vesuvio e di molte vedute di essi, ora per la prima volta ricavata dagli storici contemporanei, ed esistenti nel gabinetto del Duca della Torre. — *Napoli, 1795, in 8°, pp. 46, fol. 3.*
- TORRE DUCA (DELLA). — Lettera prima e seconda sulla eruzione del Vesuvio del 15 Giugno 1794, — *Napoli, 1794, in 8°, pp. 8+25. Several editions — In German, Dresden, 1795.*
- TORRE DUCA (SENIORE) (DELLA) — Il Gabinetto Vesuviano. — 1^a Ediz. *Napoli (?) — 2^a ediz. 1796, in 8°. fol. 1, pp. 108, fol. 4, pp. 22 — 3^a ediz. 1797, in 8°, fol. 2, pp. 86, fol. 1, pl. 22.*
- TORRE DUCA (DELLA). — Descrizione dei principali incendi del Monte Vesuvio e di molte vedute di essi. —?, in 4°, p. 86-2, From p. 55 to 63: *Catalogo delle pietre vesuviane. From p. 67 to 86: Biblioteca vesuviana esistente nel Gabinetto.*
- TORRE DUCA (JUNIORE) (DELLA).—Eruption du Vésuve. — *Ann. du Museum d'Hist. Nat. Vol. V, Paris, 1804.*
- TORRE DUCA (JUNIORE) (DELLA). — Relazione prima dell'eruzione del Vesuvio dagli 11 Agosto fino ai 18 Sett. 1804. — *Napoli. 1804, in 8°, pp. 61, fol. 1.*
- TORRE DUCA (JUNIORE) (DELLA). — Veduta di una apertura formata all'orlo del Vesuvio nell'eruzione del 22 Novembre 1804. — *Napoli, 1804, a plate in 4°, with descript. (O. V.).*
- TORRE DUCA (JUNIORE) (DELLA) — Observations sur les dernières éruptions du Vésuve. — *Journ. d. Phys d. Chimie. etc. Vol LI, Paris, 1805.*
- TORRE DUCA (JUNIORE) (DELLA). — Pianta topografica dell'interno del cratere del Vesuvio formata nel mese di Giugno 1805. — *Napoli, 1805, pl. in 4°, with description. (O. V.).*
- TORRE DUCA (JUNIORE) (DELLA) — Descrizione della eruzione del Maggio e Giugno 1806. — *Giorn. Encicl. N. 7 Napoli, 1806.*
- TORRE DUCA (JUNIORE) (DELLA). — Lettera a Domenico Catalano sulla eruzione del 1806. — *Giornal. Enciclopedico. 1806, in 8°, pp. 155-171. (C. A.).*
- TORRE DUCA (JUNIORE) (DELLA).—Catalogue abrégé de la collection

- vésuvienne de Mr. le Duc de la Torre de Naples 1820. — *fol. 2 in fol.* (C. A.).
- TORRE DUCA DELLA. — Atlante di Vedute de' principali incendij del monte Vesuvio ricavate dagli storici contemporanci ed esistente nel gabinetto del Duca della Torre. — *22 plates in 4°*, (C. A.).
- TORRE P. G. M. (DELLA)—Narrazione del torrente di fuoco uscito dal Monte Vesuvio nel 1751. — *Napoli (?)*, 1751, in 8°, pp. 23. (O. V.).
- TORRE P. G. M. (DELLA)—Storia e fenomeni del Vesuvio.—*Napoli*, 1755, in 4°, fol. 4, pp. 120, pl. 8. *figs.*—*In German (?)* 1755. — *In French*, Paris, 1760, in 12°, fol. 4, pp. 120, pl. 8, *figs.* Also with supplement, Paris, 1760, in 8°, pp. XXIV+399, pl. 6, *figs.* (C. A.).
- TORRE P. G. M. (DELLA)—Supplemento alla Storia del Vesuvio.—*Napoli*, 1761, in 4°, fig, pp. 15, pl. 1.
- TORRE P. G. M. (DELLA). — Histoire du Mont Vésuve et exposition de ses phénomènes. Extracted from: *Mélanges d'histoire naturelle.* — *Lyon*, 1765, in 8°, fig. fol. 14, pl. 1. (O. V.).
- TORRE P. G. M. (DELLA)—Incendio del Vesuvio accaduto l'anno 1766. — *Napoli (?)*.
- TORRE P. G. M. (DELLA) — Incendio del Vesuvio accaduto il 19 Ottobre 1767. — *Napoli*, 1767, in 4°, pp. 30, pl. 1, *figs.*
- TORRE P. G. M. (DELLA). — Storia e fenomeni del Vesuvio con supplemento. — *Napoli*, 1768 in 4°, fol. 3, p. 120+39, pl. 10, *figs.* (O. V.).
- TORRE P. G. M. (DELLA) — Histoire et phénomènes du Vésuve.—*Naples*, 1771, in 8°, pp. 12+298, fol. 3, pl. 11, *figs.* (O. V.).
- TORTALETTI B. — Sonetto (1631). — *See G. Urbano* (C. A.).
- TORRE P. G. M. (DELLA)—Geschichte und Naturbegebenheiten des Vesuvs von den ältesten Zeiten bis zum Jahr 1779. — *Altenburg*, 1783, in 8°, pp. 48+222+60, pl. 2. *figs.* (O. V.).
- TOSCAN B. — Précis du Journal de l'éruption du Vésuve depuis le 11 août jusqu'an 18 sept. 1804. — *Ann. du Museum*. Vol. V, pp. 448-461 *Napoli (?)*.
- TOSI C. — De Incendio Vesevi. Ode ed un Sonetto (1631). — *See G. Urbano.* (C. A.).
- TRANSARELLI O. — 1631. — *See G. Urbano* (C. A.).
- TREGLIOTTA D. — Descrizione dell'incendione del monte Vesuvio e suoi meravigliosi effetti. Principiato la notte delli 15 dicembre 1631. — *Napoli*, 1632, 8°, pp. 40.
- TROMBELLI G. — Sonetto (1631). — *See G. Urbano* (C. A.).

- T. S. A. (Tata according to A. Scacchi). — Relazione dell'ultima eruzione del Vesuvio accaduta in agosto di quest'anno. — *Giornale Enciclopedico d'Italia o sia Memorie Scient. e Lett., Napoli, 1788, in 8°, pp. 16* (C. A.).
- TURBOLI D. — Supplica et memoria al sig. Duca di Caivano, etc. Con un brevissimo racconto d'alcune sentenze di Seneca, cavata dai libri de Beneficiis, e Provedentia, e d'atre materie gradibili (Erupt. 1631.) — *Napoli, 1632, in 4, (B. N.)*.
- TURLERI H. — De peregrinatione et Agro Neapolitano. Lib. II. Omnibus peregrinantibus utiles ac necessarij: ac in eorum gratium nunc primum editi. — *Argentorati, 1574, in 8., (B. N.)*. See pp. 104-107.
- TUTINI C. — Memorie della vita, miracoli e culto di S. Gianuario martire. — *Napoli, 1633, in 4°, fol. 4, pp. 141, fol. 3, pl. 1, fgs. (C. A.)*. Another edit. 1703, in 4. (B. N.).
- TUTINI C. — Prodigiosi portenti del monte Vesuvio. Invettiva contro gli Spagnuoli in occasione dell'incendio dell'anno 1649. E note riguardanti quella eruzione per Luigi Riccio. — *Archiv. Stor. per le Prov. Nap. Ann. II, Fas. 1, Napoli, 1877, in 4°, pp. 28. (C. A.)*.
- ULLOA e SEVERINO N. — Lettere erudite. — *Napoli, 1700, in 12°, pp. 24+451+25. See pp. 166-194*.
- URSO J. DE. — Vesevi montis epitaphium. — *Napoli, 1632, in 8°, fol. 1 (C. A.)*.
- URSO J. DE — Inscriptiones. — *Napoli, 1642, in fol., fol. 11, pp. 350, Ingrav. frontisp. See pp. 14, 24, 26, 39, 99, 100, 101, 111, 331, 332, 333, 334, 336*.
- VACHMESTER M. — Analyse de la Sodalite du Vésuve. — *Annales des Mines, etc. Paris, 1817, Vol. X, pp. 262-263*.
- VALDIVIELSO J. DE SILVA. — See *Quinones*.
- VALENTINI L. — Voyage médical en Italie fait l'année 1820, précédé d'une excursion au volcan du Mont Vésuve, et aux ruines d'Herculanum et Pompéi. — *Nancy, 1822, in 8°, fol. 2. pp. 166, 2nd Edit. Paris, 1826, in 8°, pp. 399. (C. A.)*.
- VALENZIANI M. — Dissertazione della vera raccolta o sia Museo di tutte le produzioni del Monte Vesuvio. — *Napoli, ?, fol. 7 (C. A.)*.
- VALENZANI M. — Indice spiegativo di tutte le produzioni del Vesuvio, della Solfatara e d' Ischia. — *Napoli, 1783, in 4°, pp. LII, + 135 (C. A.)*.
- VALENZIANI M. — Note de la collection complète des diverses espèces de productions du Mont Vésuve. — *Without D. or L. 1, fol. in fol. (O. V.)*.

- VALETTA G. — Epistola de incendio et eruptione montis Vesuvii anno 1707. — *Philosoph. Transactions of the R. Soc. of London*, Vol. XXVIII, 1713. Venezia, 1793, pp. 59-61.
- VARONIS S. — Vesuviani incendii historiae. Libri tres. — *Neapoli* 1634, in 4°, fol. 8, pp. 400, fol. 6.
- VAUQUELIN L. N. — Analyse des cendres du Vésuve, etc. — *Mém. du Museum d'Hist. Nat.* Vol. IX. Paris, 1822, pp. 381-384 *Ann. d. Chimie.* Vol. XXV, Paris, 1824.
- VAUQUELIN L. N. — Chemische Untersuchung der Asche des Vesuv's. — *Arch. für Ges. Naturw.* Vol. I, (?),
- VELEZ DE GUEVARA LUIS. — A la Montaña de Soma. Sonetto (1631). — *See Quinones.*
- VENTIGNANO DUCA DI. — Il Vesuvio, Poema. — *Napoli*, 1810, in 8°, pp. 126, fol. 1. (C. A.).
- VENUTI D. M. DE. — Descrizione delle prime scoperte dell'antica città di Ercolano. — *Roma*, 1748, in 4°, pp. XXIII + 146. (C. A.).
- VERNEUIL (DE) E. — Sur l'état du Vésuve au commencement de Janvier 1858. — *Compt. Rend. d. l'Acad. d. Sc.* Vol. XLVI, Paris, 1858, *Bull. d. l. Soc. Géol. de France*, Vol. XV, Paris, 1858, pp. 369-370.
- VERNEUIL DE. — Sur deux ascensions qu'il a faites au sommet du Vésuve le 30 avril et le 7 mai 1868. — *Bull. Soc. Géol. 2^{me} Sér. t. XXV*, pp. 802-810, Paris, 1868.
- VERNEUIL (DE) E. — Sur l'éruption du Vésuve de 1867-68. — *Bull. d. l. Soc. Géol. de France*, Vol. XXV, Paris, 1868.
- VERNEUIL (DE) E. — Sur les phénomènes récents du Vésuve. — *Compt. Rend. d. l'Acad. d. Sc. Paris*, 1868.
- VERNEUIL (DE) E. — Note sur l'altitude du Vésuve le 26 Avril, 1869. — *Compt. Rend. Acad. Sc.* Vol. LXVIII, Paris, 1869.
- VERNEUIL (DE) E. — Sur la dernière éruption du Vésuve. — *Bull. Soc. Géol. France*, 2^{me} Sér. Vol. XXIX, Paris, 1872.
- VESUVINO CRISIPPO. — Dichiarazione genealogica fisico-chimica naturale, apologetica ed epidemica del Signor Vesuvio Frotola. — ? in 8°, pp. 16. (C. A.).
- VETRANI A. — Sebethi vindicaie, sive dissertatio de Sebethi antiquitate, nomine, fama, cultu, origine, prisca magnitudine, decremento, atque alveis, adversus Jacobum Martorellium. — *Neapoli*, 1767, in 8°, pp. 8 + 213, pl. II.
- VETRANI A. — Il prodromo Vesuviano in cui oltre al nome, origine, etc. del Vesuvio s'esaminano tutti i sistemi dei filosofi, etc. — *Napoli*, 1780, in 8°, fol. 4, pp. 238.

- VILLAYCAN GARCÉS G. DE. — El Bolcan que aborto la Montaña de Soma. Soneto (1631). — *See Quinones*.
- VILLEFOSSE (DE) I. — Vue du mont Vésuve et de son éruption arrivée le 25 Oct. 1751. — *Plate in fol. with engr. descript.*
- VIOLA S. (NAP). — Historia del Monte Vesuvio nella quale diffusamente si tratta di tutto lo che è occorso in esso dal principio del Mondo sino all'anno 1631 et 1649. Con occasione del ultima eruttatione di fuoco fatta dal detto Monte a 16 Dicembre 1631, et a 28 Novembre 1649. — *Original M. S. in fol. fol. 3 + 132.* (C. A.).
- VIRGILI P. DE. — Al Vesuvio. Poesia. — *Il Vesuvio, strenna pel Capo d'anno del 1844. Napoli, in 8°, pp. 72.* (C. A.).
- VISCARDI F. — Risposta alla lettera dell'Abate Tata de' 21 agosto per l'eruzione del 1794. — *Napoli, 1794, in 8°, pp. 16, fol. 1.*
- VOCOLA A. — Istoria dell'eruzione del Vesuvio accaduta nel mese di Maggio 1737 scritta per l'Accademia delle Scienze. — *Napoli, 1738.*
- VOLPE C. — Breve discorso dell'incendio del monte Vesuvio e degli suoi effetti. — *Napoli, 1632, in 8°, pp. 60.* (O. V.).
- VOLPICELLI F. — Il Vesuvio bocca dell'inferno. Leggenda. — *Napoli, 1871, in 8°, pp. 20* (C. A.).
- WAGNER P. — 1873. — *See Oesterland.*
- WEDDING G. T. A. — Beitrag zu den Untersuchungen der Vesuvlaven. — *Zeitschr. der Deut. Geol. Gesell. Bd. X, Berlin, 1858, t. IV, in 8°, pp. 375-411.* (C. A.).
- WEDDING G. T. A. — De Vesuvii montis lavis. — *Berolini, 1859, in 4°, pp. 30.*
- WELSCH H. — Warhafftige Reiss-Beschreibung aus eigener Erfahrung von Teutschland, Croatien, Italien denen Insuln Sicilia, Malta, ecc. Nicht wenigen bey dennen wunderbahren brennenden Bergens als dem Vesuvio bey Naples, ecc. Erupt. 1631 etc. — *Stuttgart, 1658, in 4°, fol. 12, pp. 427, 1 portrait.* (C. A.).
- WENDTRUP F. — Der Vesuv und die vulcanische Umgebung Neapels. — *Wittemberg, 1860, in 8°, pp. 35.* (C. A.).
- WINCKELMANN. — Critical account of the situation and destruction of Herculaneum, Pompei and Stabia by the first Eruption of mount Vesuvius. — *London, 1771, in 8°, pp. VIII+125.*
- ZACCARIA DA NAPOLI. — Discorso filosofico sopra l'incendio del Monte Vesuvio cominciato a' 16 Dicembre 1631, nell'apparir dell'alba. — *Printed together with Perrotti A.* (C. A.).
- ZANNICHELLI G. J. — Considerazioni intorno ad una pioggia di terra caduta nel Golfo di Venezia, e sopra l'incendio del Ve-

- svio. — *Raccolta di Opuscoli Scientifici e Filosofici. Venezia, 1727, 38, 57, Vol. LI, in 12°, figs. See pp. 87-121 T. XVI.*
- ZEZZA BARONE M. — Na chiamata alli peccature. Canzona neopp'a l'eruzione de lo Vesuvio a l'anno 1855. — *Napoli, 1855, fol. 2, (C. A.).*
- ZITO V. — Sonetti; due (1631) Per lo incendio del Vesuvio negli scherzi lirici. — *Napoli, 1631, in 12.° See pp. 401-402.*
- ZORDA G. — Discorso contro l'opinione dell'assorbimento vulcanico dell'acqua de' pozzi e del mare. — *Napoli, 1805, in 8°, pp. 15.*
- ZORDA G. — Relazione dell'eruzione del Vesuvio del 31 Maggio 1806. — *Napoli, 1806, in 4°, pp. 22.*
- ZORDA G. — Continuazione dei fenomeni del Vesuvio dopo l'eruzione del 1806 fino al principio della primavera del 1810. — *Napoli, 1810, in 8°, pp. 16.*
- ZUPO G. B. — Giornale dell'incendio del Vesuvio dell'anno 1660 con le osservazioni matematiche A. C. — *Roma, 1660, in 4°, pp. 15. (C. A.).*
- ZUPO G. B. — Continuatione de successi del prossimo incendio del Vesuvio con gli effetti della cenere e pietre vomitate da quello, e con la dichiarazione et espressione delle croce maravigliose apparse in varii luoghi dopo l'incendio. — *Napoli, 1661, in 4°, fol. 11, pl. 1 (C. A.).*





AMPI PHLEGREAE

AND

CAMPANIAN PLAIN

ABICH H. — Sur la composition du feldspath vitreux et de la riacolite (des Campi Flegrei). — *Ann. d. Mines.* 3^e, Sér. Vol. V. Paris, 1834 — *Ann. der Phys. und Chem. Band.* XXVIII. Leipzig.

ABICH H. — Geologische Beobachtungen über die vulkanischen Erscheinungen und Bildungen in Unter-und Mittel Italien. — *Braunschweig*, 1841, in 4^o, pp. XI+134 (C. A.).

ACERBI P. FRANCISCI. — Polypodium Apollineum. — *Neapoli*, 1674, fol. VIII, pp. 352 (C. A.).

AGOSTINO (D') L. — Sulle acque termo-minerali balneolane dette dei Bagnoli di proprietà di Gennaro Masullo. — *Napoli*, 1874.

AMENDUNI G. — Dell'incendio dell'agro puteolano. Epistola di Simone Porzio al Vicerè D. Pietro di Toledo. Traduzione italiana preceduta da una illustrazione critica. — *Napoli*, 1878, pp. 24. (C. A.).

ANCORA (D') GAETANO. — Guida ragionata per le antichità e per le curiosità naturali di Pozzuoli e dei luoghi circonvicini. — *Napoli*, 1792, in 8^o, pp. VI+152, pl. 52, engrav. frontspiece (C. A.). French trans. by B. de Manville, Naples, 1792, in 8^o, pp. VI+142 fol. LI.

ANONYMOUS. — Wunderbarliche und erschreckliche neue. — *Zei-*

tung so sich neulich auf den XXIII sept. in 1533 in Welschland, nicht fern von Neapolis zugetracgen haben.??, in 8.º, fol. 3.

ANONYMOUS. — Relazione del terremoto accaduto in Napoli il giorno 8 settembre 1694. — *Napoli, 1694.*

ANONYMOUS. — Analisi dell'acqua raccolta dal vapore di una fumarola della Solfatara di Pozzuoli. — *Napoli, 1790, in 8º, pp. 27 (C. A.).*

ANONYMOUS. — Breve notizia di un viaggiatore sulle incrostazioni silicee termali d'Italia e specialmente di quelle de' Campi Flegrei nel regno di Napoli (Thompson G). — *Giorn. Lett. di Napoli, 1793-1798. Vol. XLI, pp. 32-51.*

ANONYMOUS. — Osservazioni su di un fenomeno avvenuto nel lago di Patria. Lettera 1.^a e 2.^a. — *Napoli, 1796.*

ANONYMOUS. — Relazione del tremuoto sentito in Napoli e altre provincie nel 29 novembre 1732. — *Napoli, 1805.*

ANONYMOUS. — Relazione di un fenomeno avvenuto nel porto di Napoli a 14 dicembre 1798. — *Atti d. Acc. d. Sc. Vol. IX. Siena, 1808.*

ANONYMOUS. — Tableau topographique et historique des îles d'Ischia, Vendatene, Procida, Nisida, du Cap Misène, etc. — *Napoli, 1822, in 8º, pp. VIII + 216.*

ANONYMOUS. — Monte S. Simone und die Eruption von 1811. — *Morgenblatt, N. 138, pp. 551, (Cit. par Hoff Veränd. II, s. 241), 1823.*

ANONYMOUS. — Extrait d'une lettre sur le tremblement de terre qui a eu lieu dans l'île d'Ischia le 2 fév. 1828. — *Bibl. Univ. d. Sc. etc. Vol. XXXVII. Genève, 1828.*

ANONYMOUS. — Extrait d'une lettre sur le tremblement de terre qui a eu lieu dans l'île d'Ischia, le 2 fév. 1828. — *Bibl. Univ., March. 1828, pp. 236-240 (C.A.).*

ANONYMOUS. — Catalogo della Collezione Oritologica ed Oreognosica del fu chiarissimo Professore Cav. Matteo Tondi Direttore del Museo di Mineralogia di Napoli, ecc. — *Napoli, 1837, in 8º, p. VIII + 243.*

ANONYMOUS. — Istituto d'Incoraggiamento di Napoli. Brevi notizie sulle acque minerali della provincia di Napoli. — *Napoli, 1861.*

ANONYMOUS. — Sulle acque balneolane dette di Bagnoli. — *Napoli, 1863.*

ANONYMOUS. — Istituto d'Incoraggiamento di Napoli. Notizie intorno alle acque minerali delle provincie napolitane. — *Napoli, 1865.*

- ANONYMOUS. — Don Chisciòtte. Catania Casamicciola. — *Catania*, 1881.
- ANONYMOUS. — The Earthquake in Ischia. — *Illust. London News* N.º 2183, March 19th, 1881, p. 271, figs. 4 (C. A.).
- ANONYMOUS. — Casamicciola nella notte del 28 Luglio 1883. — 3 loose sheets (C. A.).
- ANONYMOUS. — Das Erdbeben auf Ischia am 28 Juli 1883. — *Munchen*, 1883, in 8º, pp. 40 with figures (C. A.).
- ANONYMOUS. — Die Erdbeben-katastrophe von Ischia am 28 juli 1883. — *Vienna*, 1883, pp. 95. pl. 16, 1 map. (C. A.).
- ANONYMOUS. — Disastri, Ischia-Giava. — *Napoli*, 1883, in 8º, pp. 178 (C. A.).
- ANONYMOUS. — Relazione della commissione per le prescrizione edilizie dell'Isola d'Ischia istituita dal Ministero dei Lavori Pubblici (*Genala*) dopo il terremoto del luglio 1883. — *Roma*, 1883, in 4º, pp. 86, col. pl. 2.
- ANONYMOUS. — Das Mare Morto bei Neapel. — *A plate?* (C. A.).
- ANONYMOUS. — Guide du Voyageur pour les Antiquités et curiosités naturelles de Pouzol, et des environs. — *Naples*, in 8º, pp. 134 (pp. 17-26: *De' Campi Flejrei e della Solfatara*).
- ANONYMOUS. — Vue de la Soufrière qui est près de Pozzuole au royaume de Naples, appelée Solfatara. — *A plate?* (C. A.).
- ANONYMOUS. — Wunderbarliche und erschrockliche neue Zeitung so sich neulich auff den 28 tag Septembris im 1538 jar in Welschland nit fern von Neapolis zugetragen huben. — ?, in 4º, (B. N.).
- ASCOLI (D'). — Earthquake at Naples. — *The Philos. Mag.* Vol. XXIII. — *London*, 1806.
- ARAGO F. — Rapport verbal sur les nouvelles recherches de M. Capocci, sur le phénomène connu de l'érosion du temple de Sérapis à Pouzzoles. — *Compt. rend. d. l'Acad. d. Sc.* Vol. IV. *Paris*, 1854, in 4º, pp. 750-753.
- AUDOT. — Royaume de Naples. — *Paris*, 1835, in 8º, pp. 370, pl. 117 (C. A.).
- BABBAGE C. — On the geognostical phenomena at the Temple of Serapis. — *The Edinb. Philos. Journ.* Vol. XI. *Edinburgh*, 1824.
- BABBAGE C. — Observations on the temple of Serapis at Pozzuoli, near Naples, with remarks on certain cause which may produce Geological Cycles of great extent. — *The American Journ. of Sc. and Arts.* Vol. XXVII, *New-Haven*, 1838. *Proceed. of the geol. Soc. of London* Vol. II. *London* 1838. —

- Quarter. Journ. of the geol. Soc. of London. Vol. III. London, 1847.*
- BABBAGE CH. — Observations on the Temple of Serapis at Pozzuoli near Naples, with an Attempt to Explain the Causes of the Frequent Elevation and Depression of Large Portions of the Earth's Surface in Remote Periods, and to Prove that those Causes Continue at the Present Time. « With a supplement: » Conjectures on the Physical Condition of the Surface of the Moon. — *London, 1847, in 8°. pp. 42. 2 Plates. (C. A.).*
- BACCHI A. — Elpidiani, Civis Romani. De Thermis, etc. — *Venetis, 1588, in fol. fig. pp. 48+492+1.*
- BALAGUER A. M. — Los estragos del Tremblor, y subterranca conspiracion. — *Napoles, 1697, pp. 360, in 4°. (C. A.).*
- BALDACCIO L. — Alcune osservazione sul terremoto avvenuto all'isola d'Ischia il 28 luglio 1883. — *Boll. Com. Geol. II. 1883. 2^a Ser. IV, pp. 157-166. Also « Science » 1883, II, 396-399.*
- BARONE G. — ΗΚΑΤΑΣΤΡΟΦΗ ΤΗΣ CASAMICCIOLA, ΤΕΤΡΑΣΤΙΧΟΝ. — *Naples, 1883, in 8°, pp. 8. (C. A.).*
- BARRAL. — Mémoire sur des roches coquillères trouvées à la cime des Alpes dauphinoises et sur des colonnes d'un temple de Sérapis à Pouzol près Naples. — *Grenoble, 1813.*
- BARTOLI S. — Breve ragguaglio dei bagni di Pozzuoli. — *Napoli, 1667, in 4°, pp. 76. (C. A.).*
- BARTOLI. — Thermologia Puteolana, — 1679, 2 Vol. pp. 304.
- BENKOWITZ C. J. — Reisen von Neapel in die umliegenden Gegenden, nebst einige Notizen über das letzte Erdbeben in Neapel. — *Berlin, 1806.*
- BERTAZZI G. — 1862. — *See Scacchi.*
- BERTHIER P. — Analyse de la Pouzzolane de Naples et du trass des bords du Rhin. — *Ann. d. Mines, Vol. I. Paris, 1827.*
- BERTOLONI A. — Su di un viaggio a Napoli nella estate del 1834.
- BERTONI. — 1874. — *See Macagno.*
- BLACHET ET LICANN. — Note sur une substance cristalline, recueillie sur les murs des bains de S. Germano près de Naples. — *Journ. d. Pharm. et d. Sc. accessoires. Vol. XIII. Paris, 1827.*
- BLAKE J. F. — A Visit to the Volcanoes of Italy. — *Proceed. Geol. Assoc. London, 1889, Vol. IX, pp. 145-176.*
- BOCCONE P. — Osservazioni naturali ove si contengono materia medico-fisiche e di botanica, produzioni naturali, fosfori diversi, fuochi sotterranei d'Italia ed altra curiosità. — *Bologna in 12°, pp. 400 fig. (C. A.).*

- BONGHI, MADIA, CASSOLA E DE-RENTI. — Memoria sulle acque termali balneolane. — *Napoli, 1863.*
- BORGIA HIERONYMUS. — Incendium ad Averuum lacum horribile pridie calendas octobris MDXXXVIII nocte intempesta exortum. — *Naples, 1538, in 4°, fol. 16. (C. A.).*
- BORGIA G. — M. Nuovo. 1538, — *See Giustiniani.*
- BORGIAE H. — Massae Lubrensis pontific, Carmina lirica et heroica quae extant. — *Venetis, 1666, in 12°, pp. 18+319.*
- BOUÉ A. — Ueber Solfataren und Kratererlosehener Vulcane. — *Sitz. d. Kais. Akad. d. Wissens. Vol. XLVIII, 1863, in 8°, pp. 20. (C. A.).*
- BRAUNS D. — Das Problem des Therapeums von Pozzuoli. — (*Leopoldina, amtliches Organ der K. leopoldino-carolinischen deutschen Akademie der Naturforscher, 24, Halle, 1888, pp. 15.*)
- BREISLAK S. — Essais minéralogiques sur la solfatar de Pozzuole. — *Naples, 1792, in 8°, p. 240, mp. I.*
- BREISLAK S. — Topografia fisica della Campania. — *Firenze, 1798, in 8°, pp. XII+368, pl. 3. (pp. 225-308).*
- BREISLAK S. — Carte physique de la Campanie. — *Dans l'ouvrage: Voyage dans la Campanie. Vol. I. Paris, 1801.*
- BREISLAK S. — Voyages physiques et lithologiques dans la Campagne suivis d'une mémoire sur la constitution physique de Rome. — *Paris, 1801, Leipzig, 1802 (In German.) Vol. I, pp. 300—XVI, pl. 3. Vol. II, pp. 324, pl. 3.*
- BREISLAK S. — Notice sur la fontaine de la fumarole à la solfatare de Pouzzoles. — *Journ. des Mines, Vol. XV, Paris, 1803-1804.*
- BREISLAK S. — Carta Topografica del cratere di Napoli e dei Campi Flegrei, colla pianta speciale del Vesuvio, secondo le ultime osservazioni del Abte Breislak. — ?, (C. A.).
- BRIVE (DE) A. — Extrait d'un voyage en Italie. Environs de Naples. — *Ann. d. l. Soc. d'Agr. du Puy, 1834.*
- BROCCHI G. B. — Notizie di alcune osservazioni fisiche fatte nel tempio di Serapide a Pozzuoli. — *Bibl. Ital. ossia Giorn. d. letter. Sc. etc. Vol. XIV, Milano, 1819.*
- BROECK (VAN DEN) E. — On some foraminifera from pleistocene beds in Ischia: preceded by some geological remarks by Ar. W. Waters. — *Quarter. Journ. of the geol. Soc. Vol. XXXIV, N. 134. London, 1878.*
- BRUNO FR. SAV. — L'osservatore di Napoli, ossia rassegna delle istituzioni civili, de' pubblici stabilimenti, dei monumenti storici, ed artistici, e delle cose notabili di Napoli, con una

- breve descrizione de' suoi contorni, ecc. — *Napoli*, 1854, in 12°, pp. 8+592. (pp. 379-386).
- BUCH (VON) L. — Scipio Breislak's physikalische Topographie von Campanien. — *Ann. der Phys. Halle und Leipzig. V Band. 1800.*
- BUCH (VON) L. — Ischia. — *Neu Jahrb. der Berg. und Hüttenkunde. Vol. I. Nürnberg, 1809.*
- BÜCH (VON) L. — Besuch und Entstehungs weise des Monte Nuovo. — *Zeitschr. d. Deuts. geol. Gesell. I Band. Berlin, 1849.*
- BUCH (VON) L. — Lettre a Naumann sur sa visite au M.^{te} Nuovo avec M. Pareto. — ?
- BULIFON A. — Lettere storiche politiche ed erudite. — *Pozzuoli 1683, in 8°, pp. 482+VII, raccolta 4^a, pp. 177-188. (C. A.).*
- BULIFON A. — Lettera al sig. D. G. F. Pacceco sul terremoto del 5 giugno 1688 in Napoli. — *Napoli, 1697.*
- BULIFON A. — Le guide des étrangers curieux de voir et de connoître les choses les plus mémorables de Pouzzol, Bayes, Cumès, Misène et autres lieux des environs, de l'abbé Sarnelli, traduite en francais, avec le texte en regard, et la description des vertus et propriétés des bains d'Ischia par J. C. Capaccio. — *Naples, 1699, in 12°, pl. 33, portrait of Bulifon. (C. A.).*
- BULIFONE N. — Distinta relazione del danno cagionato dal terremoto del 3 novembre 1706. — *Napoli, 1706.*
- BURNET G. — Monte Nuovo. Voyage de Suisse, d'Italie et de quelques endroits d'Allemagne et de France, fait ès années 1685 et 1686. — *Rotterdam, 1690, in 12°, pp. 319 (C. A.).*
- CALAMAI L. — Dell'acqua Medici di Castellamare. — *Pisa, 1849.*
- CAMPILANZI E. — Sulla corrispondenza dei cangiamenti di livello del mare osservati negli avanzi del tempio di Serapide con quelli avvenuti a Venezia. — *Ann. d. Sc. R. Istit. Lomb. Veneto, Vol. X, Padova e Venezia, 1840.*
- CANGIANO LUIGI. — Sul pozzo che si sta forando nel giardino della Reggia di Napoli e di taluni induzioni geologiche di cui è stato occasione. — *Naples, in 4°, pp. 23, (C. A.).*
- CANGIANO L. — Sul pozzo forato nel giardino della Reggia di Napoli. — 1847, ?.
- CANGIANO L. — Breve ragguaglio del perforamento dei due pozzi artesiani recentemente compiuti nella città di Napoli. — *Napoli, 1859.*
- CANGIANO L. — Sull'attuale condizione delle acque pubbliche in Napoli, e dei modi di migliorarla. — *Napoli, 1859.*
- CAPACCI J. C. — Puteolana Historia, accessit ejusdem de Balneis

Libellus. — *Neapoli, 1604, in 4°, fol. 8., pp. 208+88 many figures* (C. A.).

CAPACCIO G. C. — Il Forastiero, dialoghi ne' quali oltre a quel che si ragiona del origine di Napoli, ecc. siti e corpo della Città con tutto il Contorno da Cuma al Promontorio di Minerva, varietà e costumi di habitatori, famiglie nobili, e popolari, con molti Elogii d'huomini illustri, aggiuntavi la cognitione di molte cose appartenenti all'istoria d'Italia, con particolari relationi per la materia politica con brevità spiegate. — *Dialogo, Napoli, 1634, in 4°, pp. 56+1024.*

CAPANO G. COUNT. — Rapporto dell' Ispettore della Provincia di Napoli (Capano) sul progetto di miglioramento della bosaglia del Monte Nuovo di Pozzuoli. — *Naples, 1823, in 8°, pp. 40* (C. A.).

CAPMARTIN DE CHAUPY ABB. — Découverte de la maison de Campagne d'Horace. — *Rome, vols. III, in 8°, with. topogr. map. Vol. I. p. 101 and follow. de' Vulcani, del Vesuvio de' Campi Flegrei, etc. etc.*

CAPOCCI E. — Nuove ricerche sul noto fenomeno delle colonne perforate dalle folladi nel tempio di Serrpide. — *Il Progr. d. Sc. Lett. ed Arti. Vol. XI. Napoli, 1835. — The Edinb. New Philos. Journ. Vol. XIII. Edinburgh, 1837.*

CAPORALI G. — Della acque minerali Campane alla esposizione italiana del 1861. — *Napoli, 1861.*

CAPPA R. — Dell'analisi chimica e delle virtù medicinali dell'acqua termo-minerali di Gurgitello e di Castiglione. — *Naples, 1863, in 8°, pp. 15,* (C. A.).

CAPUA L. DI. — Lezione intorno alla natura delle Mofete. — *Napoli, 1863, in 4°, fol. VIII, pp. 176, fol. VIII. Also an edition at Cologn.* (C. A.).

CARDONE A. — Saggio di poetici componimenti (Sul funestissimo tremuoto avvenuto in Casamicciola. Ode). — *Naples, 1828, in 8°, fol. 1, pp. 25* (C. A.).

CARTELLI. — Storia della Regione abbruciata in Campagna Felice in cui si tratta il suo sopravvenimento generale, e la descrizione de' luoghi, de' Vulcani, de' Laghi, de' Monti, delle Città litorali e di popoli, etc. — *Napoli, 1787, in 4°, pp. XLIII+382. Pl. I.*

CASTALDO A. — Istorìa — Libri IV (in which are recounted the principal events that happened in the kingdom of Naples under the government of the Viceroy D. Pietro di Toledo and the Viceroys his successors till Cardinal Granvela. — *Naples, 1749, in 4°, pp. 21-155,* (C. A.).

- CASSOLA F. — 1834. — *See Sementini.*
- CASSOLA F. — Analyse des eaux minérales de Castellamare. — *Journ. d. Ch. Méd. etc. Vol. I. Paris, 1835.*
- CASSOLA F. — 1863. — *See Bonghi.*
- CAVE (LA). — 1840. — *See Costa.*
- CESTARI AB. G. — Anecdotti istorici sulle alumiere delli monti Leucogei. — *Napoli, 1790, in 12°, (B. N.).*
- CHEVALLEY DE RIVAZ E. — Précis sur les eaux minero-thermales, et les étuves de l'île d'Ischia. — *Naples, 1831, in 4°, fol 5, pp. 70. (C. A.). 2nd edit. and 3rd edit. Naples, 1837, in 8°, pp. VIII + 182.*
- CHEVALLEY DE RIVAZ E. — Description des eaux minero-thermales d'Ischia. — *1834 and 1837.*
- CHEVALLY DE RIVAZ L. — Descrizione delle acque termo-minerale e delle stufe dell'isola d'Ischia. — *Napoli, 1838, in 8°, pp. XII + 276. pl. III (C. A.).*
- CHEVALLEY DE RIVAZ E. — Voyage scientifique à Naples. — *Paris, 1843.*
- CHEVALLEY DE RIVAZ E. — Lettera al Presidente della R. Accad. d. Sc. in Napoli sopra un terremoto sentito in Casamicciola d'Ischia il 7 Giugno 1852. — *Rend. d. R. Accad. d. Sc. in Napoli., N. S. N.° 3. May and June 1852, pp. 88 (C. A.).*
- CHEVALLEY DE RIVAZ E. — Terremoto del 7 di giugno 1852 in Casamicciola. — *Rend. d. Acc. Napoli, Maggio 1853.*
- CHEVALLEY DE RIVAZ E. — Su di un terremoto ad Ischia. — *Boll. Meteor. Vol. II. Roma, 1863.*
- CHUN K. — Das Erdbeben auf Ischia. — “*Illustrirte Zeitung*” April 2nd 1881, pp. 265-268, mit 3 vignetten of B. Köhler. (C. A.).
- CIANCIO A. — Ragionamento sulla privativa del Marchese Nunziente nella fabbricazione dell' Allume Vulcanico. — *Napoli, ? in 4°, p. 60.*
- CLAUSON C. — Saggio sulla topografia dell' antica Partenope. — *Napoli, 1889, in 8°, pp. 16, map. 1.*
- COLACCI O. DE. — Dialoghi intorno a' tremuoti di quest' anno 1783. — *Napoli, ? 1783, in 8°, pp. 79 (C. A.).*
- COLLEGNO (DI) G. P. — Contrade vulcaniche delle vicinanze di Napoli. — *Atti d. 6^a Riun. d. Scienz. Ital. nel 1844. Milano, 1845.*
- COLLOMB E. — Sur un voyage géologique en Corse, en Sardaigne et aux environs de Naples. — *Bull. d. l. Soc. géol. d. France. Vol. XI, Paris, 1853-54.*
- COLOMBO A. — Osservazione sulla conformazione sottomarina del

- golfo di Napoli. — *Rivista Marittima*, Ottobre-Dicembre, 1887, *pl.*
- CONCINA G. — Casamicciola, ossia le acque minerali di Ischia. — *Venezia*, 1832.
- CONSIGLIERE (Di) C. — Notizie intorno ad una sostanza particolare che trovansi presso le acque termali d'Ischia, ed intorno ai vapori del Vesuvio. — *Giorn. d. Fis. Ch. e St. Nat.* Vol. II, *Pavia*, 1819.
- CONSTANTIN J. — Voyage scientifique à Naples avec M. Mangendie en 1843. — *Paris*, 1844, in 8°, pp. 103 (C. A.).
- CONTI. — Saggio di sperimenti su le proprietà chimiche e medicamentose delle acque termo-minerali del Tempio di Serapide. — *Napoli*, 1826.
- Contratto costitutivo della compagnia vesuviana. — *Napoli*, 1836 in 8°, pp. 30 (C. A.).
- COPPOLA M. — 1875-76. — *See Palmieri.*
- CORDIER L. — Rapport sur le voyage de M. Constant Prevost à l'île Julia, à Malte, en Sicile. aux îles Lipari et dans les environs de Naples. — *Compt. rend. d. l'Acad. d. Sc.* Vol. II. *Paris*, 1836. *Nouv. Ann. des Voy. Paris*, 1836.
- COSTA O. G. — Mammiferi viventi e fossile della fauna di Napoli. — *Napoli*, 1839.
- COSTA O. G. — Osservazioni ulteriori intorno ai fossili organici di Pozzuoli. — *Napoli*, 1853.
- COSTA O. G. — Cenni intorno alle scoperte paleontologiche fatte nel R. di Napoli durante gli anni 1854-55. — *Napoli*, 1856.
- COSTA O. G. — Intorno alle scoperte paleontologiche fatte nel regno di Napoli durante gli anni 1857-58. — *Napoli*, 1858.
- COVELLI N. — Terremoto in Ischia, 2 febbrajo 1828. — *Two autograph letters to Monticelli*, fol. 3 (C. A.).
- COVELLI N. — Observations sur le tremblement de terre qui a eu lieu dans l'île d'Ischia le 2 Janv. 1828. — *Bibl. Univ. d. Sc. etc.* Vol. XXXIX. Genève 1828. *Notiz. aus dem Gebiete der Natur. und Heilkunde XXIII, Band. Erfurt und Veimar*, 1829.
- COVELLI N. — Memoria per servire di materiale alla costituzione geognostica della Campania (1827). — *Atti d. Acc. d. Sc. fis. e Mat.* Vol. IV. *Napoli*, 1839, pp. 37.
- COVELLI N. — Cenno sul tremuoto d'Ischia. — “*Il Pontano*”, N° II, *Napoli*, 1828-29, pp. 82. (C. A.). *See also an English translation in Chapter IV of Johnston-Lavis' Monograph of the Earthquakes of Ischia, etc. Naples, 1885*

- COX. — Hints for invalids about to visit Naples, also an account of the mineral Waters of the Bay of Naples. — *London, 1841*
- D' ASCIA G. — Storia dell'isola d' Ischia. — *Napoli, 1868, in 4°, pp. 517 (C. A.).*
- DAUBENY C. — On the volcanic Strata exposed by a section made on the site of the new thermal spring discovered near the town of Torre dell' Aununziata, in the Bay of Naples ; with some remarks on the gases evolved by this and other springs connected with the volcanoes of Campania. — *The Edinb. New Philos. Journ. Vol. XIX. Edinb. 1835. Proceed. of the Geol. Soc. of London. Vol. II. London, 1838.*
- DAUBRÉE A. — Rapport sur le tremblement de terre ressenti à Ischia le 28 juillet 1883; causes probables des tremblements de terre. — *Compt. Rend. Ac. Sc. Paris, 1883, Vol. XCVII, pp. 768, Also Revue Scientif. 1883. Vol. XXXII, pp. 465.*
- DE ANGELIS G. — Casamicciola e le sue rovine. — *Napoli, 1883, in 8°, pp. 85 (C. A.).*
- DE GIUTHS M. — Casamicciola. — *Naples, 1883, in 8°, pp. 104 (C. A.).*
- DEECKE W. — Il cratere di Fossa Lupara nei Campi Flegrei presso Napoli. — *Boll. Com. Geol. 7-8. Roma, 1888; estratto da (Zeitschrift der deuts. geol. Gesellschaft, XL. Band. I, Hefl. pp. 166-172, pl. 1. Berlin, 1888.*
- DEL BALZO C. — Cronaca del tremuoto di Casamicciola. — *Napoli, 1883, in 8°, pp. 228, fol. LX. (C. A.). 2nd Edit. pp. 240 + IX.*
- DELTA (Δ) (PSEUDON FOR FORBES J. D. (?). — Remarks on the climate of Naples and its vicinity; with an account of a visit to the Hot springs of la Pisciarella, Nero's Baths. — *The Edinb. Journ. of Sc. Vol. VII. Edinburgh, 1827.*
- DE ROSSI M. S. — Intorno all'odierna fase dei terremoti in Italia e seguitamente sul terremoto in Casamicciola del 4 maggio 1881. — *Boll. Soc. Geograf. II. 1881, N° 3, in 8°, pp. 25. maps 2 (C. A.).*
- DE ROSSI M. S. — Bullettino del Vulcanismo italiano. — *Roma, 1873 to 1888, in 8°, (C. A.).*
- DESMOULINS. — Vue prise de dessus le Cratère de Monte Nuovo. — ? (C. A.).
- DEVILLE C. STE. CLAIRE. — Recherches sur les produits des volcans de l'Italie méridionale. — *Compt. Rend. Acad. Sc., T. XLII, pp. 1167-1171, Paris, June 16, 1856 (C. A.).*
- DEVILLE C. STE. CLAIRE. — Sur les émanations volcaniques (pre-

- mier mémoire). — *Compt. Rend. Acad. Sc.*, T. XLIII, pp. 955-958, Paris, Nov. 17, 1856 (C. A.).
- DEVILLE C. Ste. CLAIRE. — Mémoires sur les émanations volcaniques. — *Bull. d. Soc. Géol.* 2^e, Sér., T. XIV, pp. 254 et suiv. 16 Décem. 1856 (C. A.).
- DEVILLE C. Ste. CLAIRE. — Sur les émanations volcaniques des Champs Phlégréens. 3 Lettres à son frère M. H. Sainte Claire Deville. — *Compt. Rend. Acad. Sc.* (1^{re}), T. LIV, Paris, Mars. 10, 1862. — (2^{me}) Oct. 13, 1862, 3^{me} Nov. 13. 1865 (C. A.).
- DIENER. — Das Erdbeben auf der Insel Ischia am 28 Juli 1883. — *Mitth. d. geogr. Gesellsch. Wien*, 1884.
- DOELTER C. — Die Vulcangruppe der Pontinischen Inseln. — *Denk. d. K. Ak. d. Wissensch.* XXXVI Band. Wien, 1875.
- DOELTER C. — Vorläufige Mittheilungen über den geologischen Bau der Pontinischen Inseln. — *Sitzungsb. d. K. Ak. Wiss.* LXXI Band. Wien, 1875. *Boll. d. R. Com. Geol. d' Italia.* Vol. VI, N.° 5-6. Roma, 1875.
- DOELTER C. — Il gruppo vulcanico delle Isole Ponza. — *Mem. d. R. Com. Geol. d'Italia.* Vol. III, Part. I. Roma, 1876.
- DOLOMIEU (DE) D. — Mémoire sur les îles Ponces et catalogue raisonné des produits de l' Aetna. Paris 1788. — *Leipzig*, 1789.
- DONATO A. DI. — Dell'analisi chimica e delle proprietà medicinali dell'acqua termo-minerale detta *Subveni homini*. — Naples, 1854, in 8°, pp. 16 (C. A.).
- DU BOIS F. — The Earthquakes of Ischia. — *Trans. Seism. Soc. Japan.* Vol. VII, pt. I, 1883-84, pp. 16, 42 pl. I (C. A.).
- DU BOIS F. — Further Notes on the Earthquakes of Ischia. — *Trans. Seism. Soc. Japan.* Vol. VIII, 1885. Yokohama, pp. 95-99 (C. A.).
- DUFLOS. — Vue de la Solfatara près de Pouzzole Ancien volcan nommé par Strabon Forum Vulcani. — Naples, ? (C. A.).
- DUFRENOY P. A. — Sur les terrains volcaniques des environs de Naples. — *Compt. Rend. d. l'Acad. d. Sc.* Vol. I. Paris, 1835 pp. 4. — *Notiz. aus. d. Geb. der Natur. und Heilkunde.* XLVI Band. Erfurt und Weimar, 1835. — *The Edinb. New Philos. Jour.* Vol. XX, Edinburgh, 1836. — *Annal. d. Mines.* Vol. XI. Paris, 1837. *Proc. Verb. d. l'Acad. Philom.* Paris, 1837. Paris, 1838, in 8°, fol. 4, pp. 420, pl. 9, figs.
- DUFRENOY P. A. — De la manière dont peut se former le terrain des environs de Naples. — *Bull. d. l. Soc. géol. de France*, Vol. VIII. Paris, 1836.
- DUFRENOY P. A. — Parallèle entre le différents produits volcani-

ques des environs de Naples et rapport entre leur composition et les phénomènes qui les ont produits. — *Bull. d. l. Soc. géol. de France. Vol. IX, Paris, 1837-38.* — *Annal. d. Chim. Vol. LXIX, Paris, 1838.* — *Annal. d. Mines. Vol. XIII. Paris, 1838. Compt. Rend. d. l'Acad. d. Sc. Vol. VI. Paris, 1838.*

EUCHERII DE QUINTIIS. — *See Quintiis.*

FALCO B. DE — Antiquitates Neapolis, Atqnae etc. etc. — *Lug. Bat. in fol. pp. 48.* — *This is the oldest guide of Naples in which Vesuvius and The Solfatara are spoken of.*

FALCONI (DELLI) M. — Dell'incendio di Pozzuoli nel 1538. — *Napoli, 1538, in 4°, fol. 22.* *See also Giustiniani L.*

FAUJAS DE SAINT FOND B. — Notice sur une espèce de charbon fossile nouvellement découverte dans le territoire de Naples. — *Annal. du Muséum d'Hist. Natur. Vol. XI, Paris, 1808.*

FAZZINI G. — Cenno sulla pozzolana della Baja di Napoli. — *Napoli, 1857, in 4°, pp. 21.*

FERBER. — Lettres à Mr. le Chev. de Born sur la Minéralogie et sur divers objets d'histoire naturelle de l'Italie, traduit de l'Allemand, enrichi de notes et d'observations faites sur les lieux par M. de Dietrich. — *Strasbourg, 1776, in 8°, pp. 16 + 508.*

FERRERO O. — Relazioni sopra un minerale trovato a Lusciano. — *Annal. d. Staz. Agr. Ann. V. Caserta, 1877.*

FERRERO O. E MUSAIO. — Studii ed analisi sopra le rocce vulcaniche costitutive in alcuni punti del territorio della provincia di Caserta. — *Annal. d. Staz. Agr. Ann. VI. 1877, Caserta, 1878.*

FIESCHI-RAVASCHIERI D^{sa}. — *See Meuricoffre O.*

FLAMMARION C. — Le tremblement de terre d'Ischia. — *Rev. Mens. d'Astron. Populaire. Paris, 1883, in 4°, N.° 9, pp. 317-329, 3 fig. (C. A.).*

FONSECA F. — Descrizione e carta geologica dell'Isola d'Ischia. — *Napoli, 1847.*

FONSECA F. — Geologia dell'Isola d'Ischia (con carta geologica). — *Firenze, 1870, in 4°, pp. 31 and map.*

FORBES. — 1827. — *See Delta (Δ).*

FORBES J. D. — Physical notices of the Bay of Naples. N. 3. On the district of Posilippo and the Lago d'Agnano. — *The Edinb. Journ. of Sc. Vol. X, Edinburgh, 1829. Zeitsch fur Miner. Frankfurt am Main, 1829.*

FORBES J. D. — Physical notices of the Bay of Naples: N. 4. On the solfatara of Pozzuoli. — *The Edinb. Journ. of Sc. Vol. I,*

- New ser. Edinburgh, 1829. Notiz aus dem Geb. der Natur und Heilkunde, XXV. Band. Erfurt und Weimar, 1829.*
- FORBES J. D. — Physical notices of the Bay of Naples: N. 5. On the temple of Jupiter Serapis at Pozzuoli and the phenomena which it exhibits. — *The Edinb. Journ. of Sc. Vol. I, New ser. Edinburgh, 1829. Jour. d. Géol. Vol. I. Paris, 1830.*
- FORBES J. D. — Physical notices of the Bay of Naples: N. 6. District of the Bay of Baia. — *The Edinb. Journ. of Sc. Vol. II. New ser. Edinburgh, 1830.*
- FORBES J. D. — Physical notices of the Bay of Naples: N. 7 On the Islands of Procida and Ischia. — *The Edinb. Journ. of Sc. Vol. II, New ser. Edinburgh, 1830. Notiz. a. d. Geb. d. Natur. und Heilkunde. XXVII, Band. Erfurt und Weimar, 1830.*
- FORBES J. D. — Physical notices of the Bay of Naples: N. 8. Concluding view of the volcanic formations of the district. — *The Edinb. Journ. of Sc. Vol. III. New ser. Edinburgh, 1831.*
- FORTIS A. — Lettera economica su l'attuale stato dell' Allumiera della Solfatara di Pozzuoli. — ?, 1790, (B. N.).
- FORTIS G. B. — Osservazioni litografiche sulle isole di Ventotene e Ponza. — *Mem. d. Acc. d. Sc. Lett. ed Arti di Padova, 1794.*
- FOUGEROUX DE BOUDAREY. — Observation sur le lieu appelé Solfatare, situé près de la Ville de Naples. — *Compt. Rend. d. l' Acad. d. Sc. Paris, 1765. T. II, pp. 418-447, in 12°, pl. III.*
- FOUQUE F. — Sur les phénomènes éruptifs de l'Italie méridionale. — *Compt. Rend. Acad. Sc. Paris, 1865. pp. 41-44 (Vesuvius and Solfatara) (C. A.).*
- FREDA G. — Sulle masse trachitiche rinvenute nei recenti trafori delle collini di Napoli. — *Rend. R. Acc. Sc. Fis. Mat. Napoli, 1889. Ser. 2, Vol. II, pp. 9.*
- FREDA G. — Sulla composizione del piperno trovato nella collina del Vomero e sull'origine probabile di questa roccia. — *Rend. Acc. Sc. Fis. e Mat., S. II, Vol. II, fasc. 6°, Napoli, 1888.*
- FUCHS C. W. C. — Ueber die Entstehung der Westkuste von Neapel. — *Verhandl. d. Nat. hist. Medic. Vereins zu Heidelberg, III. Band. Heidelberg, 1865.*
- FUCHS C. W. C. — Vulkanische Gebiete Neapels. — *Neu. Jahrb. für Miner. Geogn. etc, Heidelberg, 1865.*
- FUCHS C. W. C. — Die Insel Ischia. — *Jahrb. d. K. K. Geol. Reichsanst. XXII, Band. Wien, 1872.*

- FUCHS C. W. C. — Monografia geologica dell' Isola d' Ischia. — *Mem. d. R. Com. Geol. d' Italia. Vol. II, Part. 1^a, Firenze, 1873.*
- FUCHS C. W. C. — Chemisch-geologische Untersuchung der Insel Ischia. — *Verhand. d. allgm. Schweiz. Naturf. Ges. Chur. 1875.*
- GAMBA B. — Lettere descrittive di celebri Italiani. — 2^a. edit. Venezia, 1819, in 8°, pp. 8+262.
- GARRUCCIO G. — Un simposio sul cratere di Baia, disquisizioni archeologiche di Guida da Miseno a Porto Giulio. — *Napoli, 1859, in 8°, pp. 32. (C. A.).*
- GATTA L. — L'Italia, sue formazioni, suoi vulcani e terremoti, — *Milano, 1882, in 4°, pp. XV+539, 32 figs., 3 maps. (C. A.).*
- GATTA L. — Considerazioni fisiche sull'isola d'Ischia. — *Boll. Soc. Geol. It. Anno II, fasc. 2°, 1883, in 4°, pp. 10. (C. A.).*
- GAVAUDAN G. — Memoria sopra l' uso dei bagni minerali di Gorgitello. — *Napoli, 1845.*
- GENOINO G. — Viaggio poetico pe' Campi Flegrei. — *Napoli, 1813, in 16°, pp. 122-3.*
- G. F. (FORTUNATO GIUSTINO). — I Campi Flegrei e Pompei. Ricordi dei dintorni di Napoli. — *Napoli, 1870, in 12°, pp. 54. (C. A.).*
- GIMBERNAL (DE) C. — Notice sur les colonnes du temple de Serapis près de Naples qui sont percées jusqu' à une certaine hauteur par les vers marins ou les Pholades. — *Bibl. Univ. d. Sc. etc. Vol. X. Genève, 1819.*
- GIMBERNAT (DE) C. — Phénomène observé à Massa Lubrense près Capo Campanella. — *Nouv. Ann. d. Voy. 1820.*
- GIMMA G. — Storia naturale delle Gemme, delle Pietre e di tutti i Minerali, ovvero fisica sotterranea. — *Napoli, 1730, 2 vols. in 4°, with antiporto. (Vol. I, pp. 46 + 551; Vol. II, pp. 4+603).*
- GIROND A. — Observations sur une mine de fer en sable qui se trouve aux environs de Naples — *Journ. d. Mines, Vol. III, N.° 17, Paris, 1796.*
- GIUDICE (DEL) N. — Viaggio medico ad Ischia ed altrove all'oggetto di riconoscere ed analizzare le acque minerali e le stufe. — *Napoli, 1822-25.*
- GIUSTINIANI L. — I tre rarissimi opuscoli di Simone Porzio, di Girolamo Borgia; e di Marcantonio delli Falconi, scritti in occasione della celebre eruzione avvenuta in Pozzuoli nell'anno 1538, colle memorie storiche dei sudetti autori. — *Napoli, 1817, in 8°, fol. III, pp. 219. (C. A.) (B. N.).*

- GORCEIX H. — Etat du Vésuve et des dégagements gazeux des Champs Phlégréens au mois de Juin 1869. — *Compt. Rend. d. l'Acad. d. Sc. Vol. LXXIV. Paris, 1872.*
- GORCEIX. — On the composition of the vapors or gas escaping in the Phlegrean Fields and other places near Vesuvius. — *Am. Journ. of Sc. Ser. III, Vol. IV, 1872, pp. 147. (C. A.).*
- GORCEIX H. — Sur les gaz des solfatares des Champs Phlégréens. — *Ann. d. Chim. Vol. XXV. Paris, 1872.*
- GOSSELET. — Observations géologiques faites en Italie. — *Lille, 1869, in 8°. pp. 59, pl. VII. (C. A.). Compt. Rend. Acad. Sc. T. pp. 417-475, pl. VII. (C. A.).*
- GRABLOVITZ G. — Studii mareometrici al Porto d'Ischia. — *An. dell'Ufficio centr. di Meteor. e di Geodinamica, Vol. VIII, pt. IV, Anno 1886, ? 1889, pp. 10, pl. 1.*
- GRABLOVITZ G. — Risultati delle osservazioni idrotermiche eseguite al Porto d'Ischia nel 1887. — *Ibid. pp. 12.*
- GRABLOVITZ G. — Influenza dello stato orario delle maree sulle sorgive termali del Porto d'Ischia. — *Rend. R. Acc. Lincei, Vol. IV, fasc. 7, 2° semestre, Roma, 1888, pp. 5.*
- GRABLOVITZ G. — Risultati delle osservazioni idrotermiche eseguite al Porto d'Ischia nel 1887. — *Ibid. pp. 12.*
- GRABLOVITZ G. — Sulle sorgive termali del Porto d'Ischia. — *Ibid. pp. 15,*
- GRABLOVITZ G. — Studii preliminari sulle sorgive termali al Porto d'Ischia. — *Ibid. pp. 11.*
- GRASSI M. — Relazione storica ed osservazioni sulla eruzione dell'Etna del 1865 e sui terremoti flegrei che la seguirono. — *Catania, 1865. — In French: Bull. Société Géol. d. France. Paris, 1866.*
- GUARINI G. — Analisi chimica della sabbia caduta in Napoli la sera del 26 Agosto 1834. — *Atti d. Acc. di Sc. Fis. e Mat. Vol. V. Part. II. Napoli, 1843.*
- GUERRA G. — Carta del Cratere esistente tra il Vesuvio e la spiaggia di Cuma. — *Napoli, 1797. (C. A.).*
- GUICCIARDINI C. — Mercurius campanus praecipua Campaniae felicis loca indicans et perlustrans. — *Napoli, 1667, in 12°, pp. 274, f. 6. (C. A.).*
- GUISCARDI G. — Extrait d'une lettre sur les Etuves de Néron. — *Compt. Rend. Acad. Sc., T. 43, pp. 751-752, 1856. (C. A.).*
- GUISCARDI G. — Note sur les émanations gazeuses des Champs Phlégréens. — *Bull. d. l. Soc. Géol. d. France. 2^e Série. t. XIV, 1856-57, in 8°, pp. 3. (C. A.).*
- GUISCARDI G. — Contribuzioni alla geologia dei Campi Flegrei. —

- Rendic. d. R. Acc. d. Sc. Fis. e Mat. Vol. I. Napoli, 1862. — Atti d. R. Acc. d. Sc. Vol. I, Napoli, 1863, pp. 10, pl. 2.*
- GUISCARDI G. — Sul livello del Mare nel golfo di Pozzuoli. — *Rendiconto R. Acc. Sc. Napoli, Fasc. 6° 1865, in 4°, pp. 2. (C. A.).*
- GUISCARDI G. — Sopra una nuova sorgente d'acqua minerale nella solfatara di Pozzuoli. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. Napoli, 1875.*
- GUISCARDI G. — Il Terremoto d'Ischia del 28 Luglio 1883. — *Atti d. R. Accad. d. Sc. Fis. e Mat. di Napoli. Vol. II, 2ª Ser. 1885, in 4°, pp. 8, map. 1. (C. A.).*
- HAAGEN VON MATHIESEN. — Die Wiederherstellung der Stadt Pozzuoli. — *Neues Jahrb. für Miner. etc. Stuttgart, 1846.*
- HAAGEN VON MATHIESEN. — Ueber die Entstehung des monte Nuovo und die neueste Hecla-Eruption. — *Neues Jahrb. für Miner. etc. Vol. VII, Stuttgart, 1847. — Quart. Journ. of the Geolog. Soc. of London. Vol. IV, 1847. — N. Ann. d. Sc. Nat. Vol. VII, Bologna, 1847.*
- HACKERT F. — La rada di Napoli, 1784. — *pl. in fol. mas. (O. V.).*
- HACKERT F. — Avanzi del tempio di Giove Serapide a Pozzuoli. — *1789, pl. in fol. (O. V.).*
- HALL B. — On the want of perpendicularity of the standing pillars of the temple of Jupiter Serapis, near Naples. — *The Philosoph. Magazine, Vol. VI, London, 1835.*
- HALLER. — Tableau topographique et historique des isles d'Ischia, Ponza, Ventotene, de Procida et de Nisida, du Cap de Misène et du Mont Pausilipe par un ultra-montain. — *Naples, 1822, in 8°, pp. VIII+216. (C. A.).*
- HAMILTON W. — Remarque sur la nature du sol de Naples et de ses environs. — *Philos. Trans. R. Soc. of London, 1771.*
- HAMILTON W. — Campi Phlegraei. Observations on the volcanoes of the two Sicilies. — *Vol. I, pp. 90, pl. 1, map. 1. Vol. II, pp. 53, pl. 53. Naples, 1776, in folio, with English and French text. (C. A.).*
- HAMILTON W. — Campi Phlegraei, ou observations sur les volcans des deux Sicilies. — *Paris, Lamy, an VII, 2 Vols. in folio with numerons hand coloured plates. (C. A.).*
- HAMILTON W. — Supplement to the campi Phlegrei being an account of the great eruption of mount Vesuvius in August 1779. — *In English and French, Naples, 1779.*
- HAMILTON W. — Oeuvres complètes, commentées par Giraud-Soulavie. — *Paris, 1781.*

- HAMILTON W. — Neuere Beobachtungen über die Vulkane Italiens und am Rhein, nebst merkwürdigen Bemerkungen des Absts Giraud Soulavii v. G. A. R. — *Frankfurt und Leipzig, 1784 in 8°, pp. XVI+214. map 1.* (C. A.).
- HAMILTON W. — Waarneemingen over de Vuurbergen in Italie, Sicilie, en omstreiks den Rhyn als mede over de Aardbeevingen voorgevallen in Italie 1783. — *Amsterdam, 1784, in 8° pp. 552.* (C. A.).
- HAMILTON W. — Bericht von gegenwaertigen ins lande des Vesuvs und Beschreibung einer Reise in die Provinz. Abruzzo und nach der Insel Ponza. — *Dresden, 1787.*
- HAMILTON W. — Voyages physiques et litologiques dans la Campanie. — *Paris, 1801.*
- HOFFMANN F. — Ueber das Albaner Gebirge, den Aetna den Serapis-Tempel von Pozzuoli, und die geognostischen Verhältnisse der Umgegend von Catania. — *Archiv. für Miner. Geogn. Bergbau, und Huttenkunde. III Band. Berlin 1831. The Edinb. New Phil. Journ. Vol. XII, Edinburgh, 1832.*
- HOFFMANN F. — Mémoire sur les terrains volcaniques de Naples, de la Sicile, etc. — *Bull. Soc. Géol. T. III, pp. 170-180, 1833* (C. A.).
- HÖRNES R. — Aus den phlegraischen Feldern. — *Wien, 1875.*
- HULLMANDEL C. — On the subsidence of the coast near Pozzuoli (1839). — *Proceedings of the Geol. Soc. of London, Vol. III. London, 1842.*
- IVANOFF. — Chemische Untersuchung des in Neapel gebräuchlichen Formsandes. — *Oesterreichische Zeitsch. für Berg und Hütten Wesen I, Band. Wien, 1853.*
- JAMES C. — Untersuchungen über die Ammonium grotte bei Neapel. (Traduit de la Gazz. Méd. de Paris 1843.) — *Notiz. aus dem Gebiete der Natur. und Heilkunde. XXXVIII Band. Erfurt und Weimar, 1843.*
- JANUARIO F. DE. — Felicis Campaniae hilaritas tumultata. — *Napoli, 1632, fol. xol.* (C. A.).
- JANUARIO R. — La solfatara di Pozzuoli. — *Annuario Meteor. II., Anno IV, Torino, 1889.*
- JATTA G. — Discorso sulla ripartizione Civile, e Chiesastica dell'antico agro Cumano, Misenese, Bajano, e Pozzuolano, sui famosi Campi Flegrei, sul Promontorio di Miseno, sul Monte di Procida, e sul luogo, ove secondo Virgilio fu sepolto Miseno trombettiere di Enea, sulle acque della Bolla, e sull'antico acquedotto che da Serino conduceva l'acqua in Napoli. — *Napoli, 1843, in 8°.*

- JASOLINO G. DE. — Rimedii naturali dell'Ischia. — *Napoli*, 1588, in 4°, pp. XIX + 138, pl. 1. 2nd edit. 1589.
- JERVIS G. — Tesori sotterranei dell'Italia. — 4 Vols. in 8°, Torino, 1874-1888, numerous plates.
- JOHNSTON-LAVIS H. J. — The Earthquake in Ischia. — "*Nature*" Vol. XXIII, 1881, p. 497.
- JOHNSTON-LAVIS H. J. — Etude sur l'emplacement des nouvelles villes à l'île d'Ischia. — "*L'Italie*" (Rome) Sept. 15th, 1883.
- JOHNSTON-LAVIS H. J. — Il parere d'uno scienziato. — "*Il Piccolo*" (Naples) Sept. 2nd, 1883.
- JOHNSTON-LAVIS H. J. — Le costruzioni a Casamicciola. — "*Il Piccolo*" (Naples) Sept. 20th, 1883.
- JOHNSTON-LAVIS H. J. — Notice of the Earthquake of Ischia of March 4th, 1881. — *Reports Brit. Assoc. Advancement of Science*, 1883.
- JOHNSTON-LAVIS H. J. — Notice of the Earthquake of Ischia of July 28th, 1883. — *Brit. Assoc. Reports*, 1883.
- JOHNSTON-LAVIS H. J. — Notices on the Earthquake of Ischia of 1881 and 1883 with a Map of the Isoseismal — in 8°, pp. 56, with 1 map. Naples, 1883.
- JOHNSTON-LAVIS H. J. — Observations scientifiques sur le tremblement de terre. — *L'Italie* (Rome) Dec. 12th, 1883, *The Times* (London) Dec. ? 1883.
- JOHNSTON-LAVIS H. J. — Prévision de futures catastrophes dans l'île d'Ischia. — "*L'Italie*" (Rome) Sept. 2nd, 1883.
- JOHNSTON-LAVIS H. J. — Rapport préliminaire sur le tremblement de terre du 28 Juillet 1883 à l'île d'Ischia. — "*L'Italie*," Sept. 22nd, 1883.
- JOHNSTON-LAVIS H. J. — The Disaster in Ischia. — "*Indianapolis Journal*," Sept. 6th, 1883.
- JOHNSTON-LAVIS H. J. — The Disaster in Ischia. — "*Nature*" Vol. XXVIII, pp. 346-347.
- JOHNSTON-LAVIS H. J. — The Ischian Earthquake of July 28th 1883. — "*Nature*," Vol. XXVIII, 1883, pp. 437-439, with a map.
- JOHNSTON-LAVIS H. J. — Una risposta al Prof. Palmieri. — "*Il Piccolo*" (Naples) Sept. 8th, 1883.
- JOHNSTON-LAVIS H. J. — Brevi considerazioni intorno alla relazione del professore L. Palmieri sul terremoto dell'Isola d'Ischia. — "*Il Piccolo*" (Naples) March 31st and April 1st 1884.
- JOHNSTON-LAVIS H. J. — Monograph of the Earthquakes of Ischia, a Memoir Dealing with the Seismic Disturbances in that Island from Remotest Times, with Special Observations on

those of 1881 and 1883. — *Dulau, London; and Furchheim, Naples, 1885, in royal 4°, pp. X and 112, with 20 photo-engravings, 2 large maps in color, 3 lithographic plates and 1 chromo-lithographic plate.*

JOHNSTON-LAVIS H. J. — The physical Conditions involved in the injection, extrusion and cooling of Igneous Matter. — *Quart. Journ. Geol. Soc. Lond. Vol. XLI. 1885, pp. 103-106.*

JOHNSTON-LAVIS H. J. — On the Fragmentary ejectamenta of Volcanoes. — *Proceed. Geol. Assoc. Lond. Vol. IX, 1886, pp. 421-432, fig. 3.*

JOHNSTON-LAVIS H. J. — Second Report of the Committee for the Investigation of the Volcanic phenomena of Vesuvius and its neighbourhood. — *Brit. Assoc. Reports, 1886, pp. 3, also "Nature", Vol. XXXIV, 1886, p. 481.*

JOHNSTON-LAVIS H. J. — The relationship of the structure of Igneous Rocks to the conditions of their formation. — *Scientif. Proceed. R. Dublin Soc. Vol. V, N. S., 1886, pp. 112-156.*

JOHNSTON-LAVIS H. J. — Third report of the Committee appointed for the Investigation of the Volcanic phenomena of Vesuvius and its neighbourhood. — *Brit. Assoc. Reports, 1887, pp. 3.*

JOHNSTON-LAVIS H. J. — Fourth report Committee for the Investigation of the Volcanic phenomena of Vesuvius and its neighbourhood. — *Brit. Assoc. Reports, 1889, pp. 7.*

JOHNSTON-LAVIS H. J. — Nuove osservazioni fatte in Napoli e dintorni. — (*Boll. Com. Geol. 11-12*). *Roma, 1888.*

JOHNSTON-LAVIS H. J. — Fifth Report of the Committee Appointed for the investigation of the Volcanic phenomena of Vesuvius and its neighbourhood. — *Brit. Ass. Reports, 1889, pp. 12 with 5 woodcuts.*

JOHNSTON-LAVIS H. J. — On a remarkable Soladite trachyte lately discovered in Naples, Italy. — *Geol. Mag., Dec. III., Vol. VI., 1889, N. 2. pp. 74-77.*

JOHNSTON-LAVIS H. J. — Viaggio scientifico alle regioni vulcaniche italiane nella ricorrenza del centenario del "Viaggio alle due Sicilie" di Lazzaro Spallanzani. — (*This is the programme of the excursion of the English Geologists that visited the south Italian volcanoes under the direction of the author. It is here included as it contains various new and unpublished observations*) *Naples, 1889, in 8°, pp. 1-10.*

JOHNSTON-LAVIS H. J. — Nuove osservazioni geologiche in Napoli e suoi dintorni. — *Boll. R. Com. Geol. H. Vol. XXI, N.° 1 and 2, pp. 18-27, fig. 1, pp. 65-68. (A curious error has been made by the translator who seems to have been affec-*

- ted by a mental Daltonism. (On page 67, line 3, 6 and 9 for "verdi" "read rossi" i. e. for "green" read "red.")*
- JOHNSTON-LAVIS H. J. — Osservazioni geologiche sulle isole Ventotene e Santo Stefano (Gruppo delle Isole Ponza). — *Boll. R. Com. Geol.*, Vol. XXI, N.º 1 e 2, pp. 60-64.
- JOHNSTON-LAVIS H. J. — The Ponza Islands. — *Geol. Mag.*, Dec. III, Vol. VI, 1889, pp. 529-535 with 3 woodcuts.
- JOHNSTON-LAVIS H. J. — Osservazioni geologiche lungo il tracciato del Grande Emissario Fognone di Napoli dalla Pietra sino a Pozzuoli. Relazione alla Società Napoletana degli Ingegneri Costruttori di Napoli. — *Boll. R. Com. Geol.*, Vol. XXI, 1890, N.º 1 e 2., pp. 18-27 with 1 woodcut.
- JOHNSTON-LAVIS H. J. — Sixth Report of the Committee Appointed for the Investigation of Vesuvius and its neighbourhood. — *Brit. Assoc. Reports, Leeds Meeting, London, 1890.*
- JONES E. W. S. — The earthquake at Casamicciola, July 28th 1883. — *Naples, 1883, in 8º, pp. 143.* (C. A.).
- JORIO (DE) A. — Ricerche sul tempio di Serapide in Pozzuoli. — *Napoli, 1820, in 4.º, pp. 68, pl. 3.*
- JORIO (DE) A. — Guida di Pozzuoli e Contorni. — *Napoli, 1817, in 8º, pp. VII-151. Topogr. map.*
- JORIO A. DE. — Pozzuoli und desse Umgebungen aus dem Italienischen. — *Zurich, 1830, in 8º, pp. 100.*
- JUDD W. J. — Contribution to the Study of Volcanoes. — *Geol. Mag. Vol. II, N. 133. London, 1876.*
- KADEN W. — Die Inseln Ischia in Natur Sitten. und Geschichts Bildern aus Vergangenheit und Gegenwart. — *Lutzen, Prell. no date. In 8º, pp. 115, pl. 4, map. 1* (C. A.).
- KALKOWSKY E. — Der Leucitporhyr vom Averner See. — *Neues Jahrb. für Miner. etc. Stuttgart, 1878.*
- KALKOWSKY E. — Ueber den Piperno. — *Zeitsch d. Deutsche Geol. Gesell. XXX Band, Berlin, 1878.*
- KALKOWSKY E. — Notice of Mercalli (sulla natura del terremoto Ischiano, 1883). — *New. Jahrb. f. Mineral, etc. 1886, I, pp. 258-259.*
- KOSMAN B. A. — De nonullis lavis Arverniacis dissertatio inauguratis mineralogica-chimica. — *Statis Saxoniae, 1864, in 8º, (B. N.).*
- KRESSNER. — Geographisch-orographische Uebersicht über das Vulkanische terrain im Neapolitanischen. — *Berg-und-hütten-männ. Zeitung, XXII Band, Nordhausen und Leipzig, 1863.*
- LALANDE M. DE. — Voyage en Italie, contenant l'histoire, et les

- anecdotes les plus singulieres de l'Italie, etc., etc. — *Genève*, 1790, Vols. 7, in 8°, with maps in 4.° pl. XXXV, Vol. VI, pp. 18-39. *Solfatara di Pozzuoli*.
- LANCELOTTI F. — Memoria sull'analisi e sintesi dell'acqua solfurea di Napoli. — *Atti d. Soc. Pontan. Vol. II, Napoli*, 1812.
- LANZETTA A. — Risposta alla 1^a. di un anonimo sulle osservazioni di un fenomeno avvenuto nel lago di Patria. — *Napoli*, 1796.
- LA PIRA. — Memoria sull'origine, analisi ed uso medico delle acque minerali di Terra di Lavoro. — *Caserta*, 1820.
- LASAULX VON. — Das Erdbeben von Casamicciola auf Ischia (4 marzo 1881). — "*Humboldt*," *Stuttgart*, Jun 1882, in 4°, pp. 5 (C. A.).
- LAURENTIIS M. DE. — Universae Campaniae Felicis Antiquitates. — *Neapolis*, 1826, vols. 2, in 4°, Parte II, pp. 42 and foll. *Monte Nuovo etc.*
- LEBERT H. — Le Golfe de Naples et ses volcans et les volcans en général. — *Vevey, Lausanne, etc.* 1876, in 8°, pp. 120, pl. 1. (C. A.).
- LECANN L. R. — 1827. — See *Blachet*.
- LE RICHE I. — Antiquités des environs de Naples et dissertation qui y sont relatives par M. J. L. R. — *Naples*, 1820, in 8°. fol. 2, pp. 392, maps 3, fol. 3 (C. A.).
- LIBELLUS. — De mirabilibus civitatis Puteolorum et locorum vicinorum: ac de nominibus virtutibusq. balneorum ibidem existentium. — 1507, in 4°, fol. 32. Another edition, *Naples*, 1475, in 4°, fol. 37 (C. A.).
- LICOPOLI G. — Su d'un pezzo di Legno rinvenuto nel tufo vulcanico appresso Napoli. — *Rend. R. Accad. Sc. Fis. Mat. An. XIII, Napoli*, 1874, pp. 141-143.
- LIPPI C. — Fu il fuoco o l'acqua che sotterrò Pompei ed Ercolano?. — *Napoli*, 1816.
- LOBLEY L. J. — Mount Vesuvius. A description, Historical and Geological account of the Volcano and its Surroundings. — *London, Roper and Drowley*, 1889, in 8°, pp. 385, p. 20.
- LOFFREDI F. — Antiquitas Puteolorum, cum balneorum Agnani, Puteolorum, et Tripercolarum descriptionibus, etc., etc. — *Lug. Bal.*, in fol. pp. 28.
- LOFFREDO F. — Le antichità di Pozzuoli e luoghi vicini nuovamente raccolte. — *Napoli*. 1580, in 12°, fol. 24 (C. A.). Another edit. *Napoli*, 1675, in 4°, pp. 4+38.
- LOMBARDI A. — Cenno sul tremuoto avvenuto in Tito, ed in altri luoghi della Basilicata il dì 1 Febbraio 1824. — *Potenza* 1829.

- LOMBARDUS J. F. — De balneis aliisque miraculis Puteolanis. — *Venetiis*, 1566.
- LOMBARDUS J. F. — Synopsis Autorum omnium qui haec de balneis, aliisque miraculis Puteolanis scripserunt. — *Napoli*, 1557, fol. 124. (C. A.).
- LUCA (DE) S. — Studii fisico-geografici sulla regione da Baia a Castellamare. — *Napoli*, 1865.
- LUCA (DE) S. — Osservazioni sulla composizione dell'acqua termale della Solfatara di Pozzuoli. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. Napoli*, 1868.
- LUCA (DE) S. — Osservazioni sulla temperatura interna della grande fumarola della Solfatara di Pozzuoli, — *Napoli*, 1869.
- LUCA (DE) S. — Ricerche chimiche e terapeutiche sull'acqua termo-minerale della Solfatara di Pozzuoli, — *Rend. d. Acc. d. Sc. Fis. e Mat. Vol. VIII, Napoli*, 1869. *Journ. de Chim. méd. de Pharm. etc. Vol. VI, Paris*, 1870.
- LUCA (DE) S. — Analyse de l'eau thermo-minérale de Pouzzoles. — *Journ. de Pharm. et de Chimie, Vol. XII, Paris*, 1870. — *Compt. rend. d. l'Acad. d. Sc. Paris*, 1870.
- LUCA (DE) S. — Ricerche chimiche sopra una produzione stalattica della Solfatara di Pozzuoli. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. Vol. X, Napoli*, 1871. — *Gazz. Chim. ital. Vol. II. Palermo*, 1872. — *Riv. Scient. Industr. Firenze* 1873. *Compt. Rend. d. l'Acad. Sc. Vol. LXXVI. Paris*, 1873.
- LUCA (DE) S. — Ricerche chimiche sull'allume ricavato dall'acqua termo-minerale della Solfatara di Pozzuoli. — *Napoli*, 1871.
- LUCA (DE) S. — Recherches chimiques sur un alun complexe, obtenu de l'eau thermo-minérale de la Solphatère de Pouzzoles. — *Compt. Rend. d. l'Acad. d. Sc. Vol. LXXIV, Paris*, 1872.
- LUCA (DE) S. — Sulla composizione dei gaz che svolgonsi dalle fumarole della Solfatara di Pozzuoli. — *Rendic. d. R. Acc. d. Sc. Fis. e Mat. Vol. X, Napoli* 1871. *Compt. Rend. d. l'Acad. d. Sc. Vol. LXXIV, Paris*, 1872. *Ann. d. Chim. Vol. XXVI, Paris*, 1872. *Gazz. Chim. ital. Vol. II. Palermo*, 1872.
- LUCA (DE) S. — Ricerche analitiche sopra quattro diverse terre della Solfatara di Pozzuoli. — *Napoli*, 1873.
- LUCA (DE) S. — Ricerche analitiche sopra talune produzioni stalattitiche della Solfatara di Pozzuoli. — *Napoli*, 1874.
- LUCA (DE) S. — Ricerche chimiche sopra una sostanza legnosa trovata nel tufo vulcanico. — *Napoli*, 1874.
- LUCA (DE) S. — Ricerche sperimentali sulla Solfatara di Pozzuoli.

- li. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. Napoli*, 1874, pp. 104, pl. V.
- LUCA (DE) S. — Sopra una nuova sorgente di acqua termo-minerale, scoperta nella Solfatara di Pozzuoli. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. Napoli*, 1875.
- LUCA (DE) S. — Sulla presenza del litio nelle terre e nelle acque della Solfatara di Pozzuoli. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. Napoli*, 1875. *Riv. Scient. Indust. Firenze*, 1875.
- LUCA (DE) S. — Recherches sur la présence du Lithium dans les terres et dans les eaux thermales de la Solfatara de Pouzzole. — *Compt. Rend. d. l'Acad. d. Sc. Vol. LXXXVII, N.º 4. Paris*, 1878.
- LUCA (DE) S. — Sulle variazioni di livello dell'acqua termo-minerale nel pozzo della Solfatara di Pozzuoli. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. Ann. XVII. Napoli*, 1878.
- LUCA (DE) S. — Sul livello dell'acqua termo-minerale della solfatara di Pozzuoli. — *Napoli*, 1878.
- LYELL C. — On the successive changes of the temple of Serapis. — *Notice of the Proceed. at. t. meet. of. t. memb. of the R. Institution Vol. II, London*, 1854. Also *Amer. Journ. Science*, 2nd Ser. Vol. XII, pp. 126-129.
- MACAGNO E BERTONI. — Analisi della terra della Solfatara di Pozzuoli. — *R. Staz. Enol. Sperim. Ann. II, Asti*, 1874.
- MACINTOSH C. — On the tides at Naples. — *Quart. Journ. of the Geolog. Soc. of London*, Vol. IV, London, 1848.
- MACINTOSH C. — The temple of Serapis at Pozzuoli. — *Atheneum*, Page 801. 1848.
- MADIA. — 1853. — See *Bonghi*.
- MAFFEI G. C. — Scala naturale, ovvero fantasia dolcissima intorno alle cose occulte e desiderate nella Filosofia. — *Vinegia*, 1573, in 8º, fol. 140. Nel secondo grado Cap. I: Cagion perchè in Pozzuolo sono bagni, etc. etc.
- MAJO. — Trattato delle acque acidule che sono nella città di Castellammare di Stabia. — *Napoli*, 1754.
- MARANTA B. — De aquae Neapoli, in Luculliano scaturientis (quam ferream vocant) metallica materia, ac viribus epistola — *Neapoli*, 1559, in 4. Parch. Very rare.
- MARCELLO M. — Ischia, canti 3. — *Milano* 1863.
- MARCHESINO F. — Copia di una lettera di Napoli che contiene li stupendi e gran prodigii apparsi sopra a Pozzolo. — *Napoli*, 1538, fol. 4 and engraved frontispiece (C. A.).
- MARCHINAE M. — Virginitis Neapolitanae Musa posthuma. — *Nea-*

- poli, 1701, in 12°, pp. 12+144. De incendio Montis Vesuvii Ode p. 118.*
- MARIENI L. — 1862. — *See Scacchi.*
- MARONE V. — Memoria contenente un breve ragguaglio dell'Isola d'Ischia, — *Napoli, 1847.*
- MASELLA E. — Poesie latine istoriche colle note in italiano. — *Napoli, 1795, in 4°, pp. 74. (Monte Nuovo, 29 Sept. 1538, and Solfatara).*
- MASINO DI CALVELLO M. A. — Distinta relatione dell'incendio del sevo Vesuvio alli 16 di Dicembre 1631, successo, con la relatione della città di Pozzuoli, e cause delli terremoti, al tempo di D. Pedro de Toledo Vicerè in questo Regno nell'anno 1534 (1538). — *Napoli, 1632, in 4°, pp. 36. (C. A.).*
- MAZZELLAE SC. — Situs et antiquitas Puteolorum, locorumque vicinorum, etc. etc. — *Lugduni Batavorum, in fol. pp. 4+92+6. (Earthquakes in Pozzuoli of 1198, 1456 and 1538.*
- MAZZELLAE SC. — Urbium Puteolorum, et Cumarum descriptio, etc. etc. — *Lugduni Batavorum, in fol. pp. 4+20+2 Topogr. map.*
- MAZZELLA S. — Descrizione di Napoli. — *Napoli, 1586.*
- MAZZELLA S. — Sito et antichità della città di Pozzuolo e del suo amenissimo distretto. — *Napoli, 1595, in 8°, pp. 291, figs, map. 1.*
- MAZZELLA S. — Opusculum de Balneis Puteolorum Bajarum et Pethecusarum. — *Neapolis, 1593, pp. 43.*
- MEDNYANSZY (VON) D. — Beobachtungen in geologischer Beziehung auf einer Reise durch Italien bis Neapel. — *Verhandl. d. Ver. f. Naturh. z. Pressburg, B. IV, 1859.*
- MELLONI M. — 1840-42. — *See Piria.*
- MÈNE C. ET ROCCATAGLIATA. — Analyses de quelques eaux des sources thermales d'Ischia près Naples. — *Compt. Rend. d. l'Acad. d. Sc. Vol. LXVI, Paris, 1868.*
- MERCALLI G. — Sulla natura del terremoto ischiano del 28 Luglio 1883. — *Rendic. d. R. Ist. Lomb. Ser. II, Vol. XVII, fasc. XIX, Milano, 1884, pp. 15, (C. A.).*
- MERCALLI G. — L'isola d'Ischia ed il terremoto del 28 luglio 1883. — *Atti R. Ist. Lombardo?, Milano, 1884, in 4°, pp. 55, pl. 2, map. col. 1.*
- MEURICOFFRE O. AND FIESCHI-RAVASCHIERI D^{SSA}. — La Carità nell'isola d'Ischia. — *Napoli, 1883, in 12°, pp. 175. (Also a French edition without tables of account).*
- MIGLIETTA. — Rapporti sull'uso medicinale delle acque minerali

- del Tempio di Serapide in Pozzuoli. — *Napoli, 1818, in 4°, pp. 88.* (C. A.).
- MIGLIETTA. — Acqua minerale del Tempio di Serapide in Pozzuoli. — *Giorn. Arc. d. Sc. etc. Vol. VII. Roma, 1820.*
- MISSON M. — Nouveau voyage d'Italie. — *La Haye, 1694, in 12°, fig.*
- M. J. L. R. (LE RICHE). — Antiquités des environs de Naples, et dissertations qui y sont relatives. — *Naples, 1820, in 8°, (B. N.).*
- MONTICELLI T. — Recherches sur le territoire de Pozzuoles et des Champs Phlégréens. — *Annales des Mines, etc. Paris, 1816-1826, 30 vols. 1817. (Vol. V. 2^e série, pp. 293-294).*
- MONTICELLI T. — Commentarium. In Agrum Puteolanum camposque phlegraceous Commentarium. — *Napoli, 1826, in 4°, fol. XIV, pp. 25,* (C. A.).
- MONTICELLI T. — Opere. — *Napoli 1841-43, Vol. 3, in 4°, fig. 1, in two vol. (vol. 1°, fol. 7, pp. 295, pl. 2.; vol. 2°. pp. 335 pl. 2 (O. V.).*
- MORGHEN F. — Pianta del cratere tra Napoli e Cuma, incisa da Filippo Morghen. — ?, (C. A.).
- MORO G. — La grotta del Circeo e il tempio di Serapide in Pozzuoli. — *Ateneo Veneto. S. XIII, Vol. II, 1-2-3. Venezia, 1889.*
- MALLET R. — The great Neapolitan Earthquake of 1857. — *II Vols. in 8°, London, 1862, numerous plates and figures.*
- MALLET R. — On some of the conditions influencing the projection of discrete solid materials from Volcanoes, and on the mode in which Pompeii was overwhelmed. — *Jour. Geol. Soc. Ireland, Vol. IV, pt. III, Dublin, 1876.*
- MAJONE. — Breve descrizione della Real Città di Somma. — *Napoli, 1702.*
- MORGHEN F. — Veduta del Foro di Vulcano denominato la Solfatarà. — ? 1 pl. in fol. (O. V.).
- MORMILE G. — Descrizione della Città di Napoli e del suo amenissimo distretto e dell'antichità della città di Pozzuoli. — *Napoli, 1617, and 1625, in 8°, pp. 248, pl. 3, figs. 3rd edit. 1670, pp. 251, pl. figs. (C. A.).*
- MORMILE G. — Nuovo discorso intorno all'antichità di Napoli, e Pozzuoli. — *Napoli, 1629, in 8°, pp. 69.*
- MUELLER A. — Ueber das Vorkommen von reinem Chlorkalium am Vesuv. — *Verhand. d. Nat. Ges. in Basel, 1^{es}, helf 1854, pp. 113-119 (C. A.).*
- MUNICIPIO DI NAPOLI. — Relazione della Giunta al Consiglio sui

- provvedimenti adottati per la eruzione del Vesuvio 1872 ed atti relativi. — *Napoli, 1872, in 4°, pp. 31.* (C. A.).
- MÜNTER T. L. — Parerga historico-philologica. De Herculaneo. XV. Vesuvii montis descriptio. — *Göttingae, 1749, in 8°, fol. 4, pp. 128, pl. 1,* (C. A.).
- MUSAIO, — 1878. — *See Ferrero.*
- NAPOLI-ISCHIA. — Numero unico, pubblicato a beneficio dei danneggiati di Casamicciola e Lacco Ameno dagli studenti della Facoltà di Lettere e Filosofia di Napoli. — *Napoli, 1881, pp. 21.* (C. A.).
- NAPOLI-CASAMICCIOLA (NEWSPAPER, 1 NUMBER). — Napoli ai danneggiati di Casamicciola. — *Napoli, 1881, pp. 6,* (C. A.).
- NERO E. DEL. — Lettera a Niccolò del Benino sul terremoto di Pozzuoli, dal quale ebbe origine la montagna nuova nel 1538. — *From pp. 93 to 96 of Vol. IX, Archivio Storico Italiano. Firenze, 1846, in 8°,* (C. A.).
- NICCOLINI A. — Rapporto sulle acque che invadono il pavimento dell'antico edificio detto il tempio di Giove Serapide. — *Napoli, 1829, in 4°, pp. 7 + 46, pl. I.*
- NICCOLINI A. — Tavola metrica-cronologica delle varie altezze tracciate dalla superficie del mare fra la costa di Amalfi ed il promontorio di Gaeta nel corso di diciannove secoli. — *Napoli, 1839, in 4°, pp. 52,* (C. A.).
- NICCOLINI A. — Descrizione della Gran-Terma Puteolana volgarmente detta Tempio di Serapide. — *Napoli, 1846, in 4°, pp. 95, numerous col. and uncol. pl., maps, etc.*
- NICOLUCCI G. — Analisi microscopica della pretesa muccilagine che si forma sulle acque termo-minerali del Tambura di Senogalla e della Rete nell'Isola d'Ischia. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. Vol. I. Napoli, 1842.*
- NISCO N. — Lettere sull'Isola d'Ischia ed una su Portici cont. in 6 numeri di « Il Diritto ». — 1869.
- NIXON J. — An account of the Temple of Serapis at Pozzuoli in the Kingdom of Naples. — *Phil. Transact. of the R. Soc. of London, Vol. X, 1757, pp. 166-174, pl. 1.*
- NOVI G. — Calcarea con *Cardium* contenuta nel tufo di Posilipo?
- O' REILLY. — The earthquake of Ischia, July, 28, 1883. — *Nature, 1883, Vol. XVIII, pp. 461.*
- ORLICH (VON) L. — Die Insel Ischia. — *Zeitschr. für allgem. Erdkund. Bd. II, Berlin, 1854, pp. 388-416.*
- PACICHELLI G. B. — Memorie de' Viaggi per l'Europa Christiana scritte a diversi in occasione de' suoi Ministeri. — *Napoli, 1685, Vols. 5, in 12°. Parte I, pp. 40+743+53. Parte II,*

- 8+827+40. *Parte III, pp. 8+761+27. Parte IV, vol. I, pp. 4+541+20. Parte V, vol. II, pp. 4+438+18. (See Parte IV, vol. I, pp. 196 and follow. Della Solfatara.)*
- PALATINO L. — Storia di Pozzuoli e contorni con breve trattato storico di Ercolano, Pompei, Stabia e Pesto. — *Napoli, 1826, in 8°, pp. 336, pl. I, maps 2. (C. A.).*
- PALLOTTA (DOTT.) G. — Brevi cenni sulla uniformità delle Terme di Casamicciola animate dall'unica acqua di Gurgitello. — *Napoli, 1873.*
- PALMERI P. — Le terme del pio monte della Misericordia in Casamicciola (Ischia) dopo il terremoto del 4 maggio 1881. — *Napoli, 1881, in 4°, pp. 11. (C. A.).*
- PALMERI P. — Ricerche storiche sul nome e sul luogo e confronti delle analisi delle acque di Gurgitello. — *Napoli, 1879.*
- PALMERI P. — Il pozzo artesiano dell'Arenaccia del 1880 confrontato con quello del Palazzo Reale di Napoli del 1847. — *Lo Spettatore del Vesuvio e dei Campi Flegrei. Nuova Serie Vol. 1°. Napoli, 1887, pp. 53-58, pl. I. (C. A.).*
- PALMERI P. E COPPOLA M. — Acque minerali del Pio monte della Misericordia in Casamicciola (Ischia). Analisi chimiche delle acque, delle concrezioni e dell'atmosfera delle stufe. — *Napoli, 1875-76.*
- PALMIERI L. — Sulle scosse di terremoto avvertite in Napoli il dì 24 Giugno 1870. — *Rend. d. R. Acc. d. Sc. fis. e mat. Vol. IX. Napoli, 1870.*
- PALMIERI L. — Il Litio scoperto dal Prof. S. De Luca nelle terre della Solfatara, riveduto collo spettroscopio: — *Rend. d. R. Acc. d. Sc. Fis. e Mat. Napoli, 1875.*
- PALMIERI L. — Interno ad un piccolo terremoto accaduto in Napoli il 18 Febbraio. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. Napoli, 1876.*
- PALMIERI L. — Sul terremoto di Casamicciola del 4 Marzo 1881. — *Rend. Acc. Sc. Fis. Mat. Napoli, Fasc. 4°, 1881, pp. 8.*
- PALMIERI L. — Osservazioni simultanee sul dinamismo del cratere vesuviano e della grande fumarola della Solfatara di Pozzuoli fatte negli anni 1888-89-90. — *Rend. R. Acc. Sc. Fis. Mat. Napoli, 1890, pp. 3.*
- PALMIERI L. AND OGLIALORO A. — Sul terremoto dell'isola d'Ischia della sera del 23 Luglio, 1883. — *Napoli, 1884, in 4°, pp. 28, map. 1.*
- PANVINI P. — Il forestiere alle antichità e curiosità naturali di Pozzuoli, Cuma, Baja e Miseno in tre giornate, — *Napoli, 1881, in 8°, pp. VIII+156, pl. 53. (C. A.).*

- PAOLI (PADRE). — Le antichità di Pozzuoli. — *Napoli*, 1768.
- PARENTE M. — Parthenope terraemotu vexata Magnam Matrem publicae securitatis sospitem diligit, et ejusdem dolorum cultui se addicit. Carmen. — *Neapoli*, 1830, in 4°, pp. 11.
- PARRINO D. A. — Moderna distintissima descrizione di Napoli, Città nobilissima, antica e fedelissima, e del suo Seno Cratere. — *Aggiunte, osservazioni e correzioni a questo primo tomo della nuova descrizione di Napoli: Napoli*, 1703-1704, vol. 2°, in 12°, (Vol. I, pp. 20+438+54+46+2. Vol. II, pp. 16+292+23, XXVIII. pl.
- PARRINO D. A. — Nuova guida dei Forestieri per osservare e godere le curiosità più vaghe della fedelissima gran Napoli. — *Napoli*, 1725, in 12°, fol. 18, pp. 382, maps 31, pl. 40, (C.A.). *Another edition* 1751, in 12°, fol. 2., pp. 269, pl. 30, maps 9. (C. A.).
- Parthenope terraemotu vixata, etc. — *See Miscellanea Poetica*. (C. A.).
- PASCA W. — Intorno ad una pozzolana rinvenuta presso Itri e delle pozzolane in generale. — *Napoli*, *Tip. Bontis*.
- PASINI L. — Sul pozzo artesiano di Napoli. — *Atti d. I. R. Istit. Ven. di Sc. Lett. e Arti. Venezia*, 1825-26.
- PELLEGRINO C. — Discorsi sulla Campania Felice. — *Napoli*, 1631, in 4°, fol. 56, pp. 780, pl. 1. (C. A.).
- PER ISCHIA. — « Corriere del Mattino » of Naples, *Loose sheets*. pp. 10. (C. A.).
- PETRUCCELLI F. AND PACI G. M. — Memoria chimico-medica su l'acqua termo-minerale del Bagnolo nelle vicinanze di Napoli. — *Napoli*, 1832, in 8°, pp. 18. (C. A.).
- PETTERUTI G. — La solfatara di Pozzuoli. — *L'Idrologia-medica Ann. II*, N. 9, 10 e 11. — *Il Golfo di Napoli*, *Idrol. Med.* N. 40. Bassano, 1880.
- PFLAUMERN J. H. A. — Mercurius Italicus hospiti fidus per Italiae et urbes, etc. etc. — *Augustae Vindelicorum*, 1625, in 8°, pp. 32+484+2. From pp. 371 and foll. *Campi Flegrei*.
- PHILIPPI R. A. — Ueber die sub fossilen Lebthier-Reste von Pozzuoli bei Neapel und auf der Insel Ischia. — *Neues Jahrbuch für Miner. Geogn. Geol. etc. Bd. V*, Stuttgart, 1837.
- PIGNATELLO A. — Rime date nuovamente alle stampe, e dedicate al sig. Principe di S. Severo. — *Napoli e Gallipoli*, 1593, in 4°, pp. 8+94. *Sonetto C. alla Solfatara di Pozzuoli*, pp. 69.
- PILLA. N. — 1.° e 2.° viaggio geologico per la Campania. — *Napoli*, 1814, in 8°.

- PILLA N. — Geologia vulcanica della Campania. — *Napoli, 1823, Vol. II, in 8°. Vol. I, pp. XIX+125, Vol. II, pp. 160.*
- PILLA L. — Osservazioni gegnostiche sulla parte settentrionale ed orientale della Campania. — *Ann. Cir. d. R. Due Sicilie. Vol. III, pp. 117-147, Napoli, 1833.*
- PILLA L. — Nota sulla questione del Serapeo toccata dal Cav. Tenore. — *Il Progr. d. Sc. etc. Vol. XIX, Napoli, 1838.*
- PIRIA R. — Sull'azione che alcuni corpi riscaldati esercitano sui vapori che si sviluppano da' fumaioli della Solfatara. — *R. Acc. d. Sc. Napoli, 18 Agosto 1840? pp. 9. (C. A.).*
- PIRIA R. ET MELLONI M. — Recherches sur les fumeroles, les solfatares, etc. *Compt. Rend. d. l'Acad. d. Sc. Vol. XI. Paris, 1840. — Ann. d. Chim. Vol. LXXIV, Paris, 1840. — Journ. für Prakt. Chem. Bd. XXII, Leipzig, 1841. — Notiz. aus dem Gebiete der Natur-und Heilkunde, Bd. XVI, Erfurt und Weimar, 1840. — Ann. der Physik. und Chem. Bd. LI, Leipzig, 1842.*
- POLI G. S. — Memoria sul tremuoto de' 26 Luglio del corrente anno 1805. — *With 3 fol. Napoli 1806.*
- PONZI G. — Osservazioni geologiche fatte lungo la Valle Latina da Roma a Monte Cassino. — *Atti d. Acc. Pont. d. N. Lincei, Vol. I, Roma, 1847-48. — Corrisp. Scient. in Roma per l'avanz. d. Sc. Vol. II, 1853. — N. ann. d. Sc. Nat. Vol. X, 1848.*
- PONZI G. — Carta geologica della Valle latina da Roma a Monte Cassino. — *Roma, 1850.*
- PORTII S. — *See following.*
- PORZIO S. — De conflagratione Agri Puteolani. — *Napoli, 1538, in 8°, pp. 8, frontisp (The only known copy of this edit. is in C. A.). Florentiae, 1551, in 4°, pp. 8. (B. N.) See also Giustiniani L.*
- PREVOST C. — Voyage à l'île Julia, à Malte, en Sicile, aux îles Lipari et dans les environs de Naples. — *Compt. Rend. d. l'Acad. d. Sc. Vol. II, Paris, 1836.*
- PROCTOR R. A. — Le Vésuve et Ischia. — *Revue Mens. d'Astron. Pop. — Paris, Sept. 1883, pp. 349-343. (C. A.).*
- QUINTIUS C. E. — Inarium seu de balneis Pithecusarum; libri sex. *Neapoli, 1726, in 8°, fol. 32, pp. 320, pl. 7, frontisp. (C. A.).*
- RANIERI A. — Documenti storici-geologici sulle antichità delle acque termali e sulle arene scottanti del litorale dei Maronti nell'isola d'Ischia. — *Napoli, 1871, in 4°, pp. 59.*
- RATH (VOM) G. — Mineralogische geognosticae fragmente aus Ita-

- lien. V. Monte di Cuma, Ischia und Ebene. — *Zeitschr. der Deuts. geol. Gesell. Bd. XVIII, Berlin, 1866.*
- RATH (VOM) G. — Tridymit im Neapolitanischen Vulcan Gebiete. — *Ann. d. Phys. und ch. Bd. CXLVII, Leipzig, 1873.*
- RENZI (DE). — 1863. — *See Bonghi.*
- REZRADORE P. — I disastri d' Ischia e di Giava. — *Roma, 1883, in 8°, pp. 35, maps. 2. (C. A.).*
- RICCIARDI L. — I tufi vulcanici del Napoletano. — *Atti d. Acc. Gioenia d. Sc. Nat. in Catania, Ser. 3.^a, Vol. XVIII, pp. 10. (C. A.).*
- RICCIARDI L. — Sull'allineamento dei vulcani italiani, etc. — *Reggio-Emilia, 1887, in 8°, pp. 10, col. map 1.*
- RICCI G. — Analisi chimica dell'acqua ferrata e solfurea di Napoli con un appendice sopra un nuovo liquido vesuviano. — *Napoli, in 8°, fol. 1, pp. 27. (C. A.). Giorn. Arcad. d. Sc. etc. Vol. XII, Roma, 1821.*
- RIVAZ (CH. D). — Description des eaux minéro-thermales et des étuves de l'île d' Ischia. — *Naples, 1837.*
- ROCCATAGLIATA P. — 1868. — *See Mene.*
- ROCCATAGLIATA P. E FERRERO O. — Studii analitici sulle acque minerali-termali di Sujo in prov. di Terra di Lavoro. — *Aversa, 1877.*
- ROCKWOOD C. G. FR. — The Ischian earthquake of July 28th 1883. — *Am. Journ. Sc. 1883, Vol. XXVI, pp. 473-476.*
- ROHAN LE DUC DE. — Formation du Monte Nuovo. — *Voyage du duc de Rohan fait en l'an 1600. Amsterdam, 1646, pp. 102-103.*
- ROLLER I. — Un tremblement de terre à Naples et la charité du gouvernement Napolitain. — *Genève, 1860.*
- ROMANELLI D. — Viaggio a Pompei, a Pesto e di ritorno ad Ercolano e Pozzuoli. — *Napoli, 1817, vols. 2, in 12°. Parte I. pp. 228-II, pl. Parte II, pp. 276, II, pl. (Parte II. pp. 116-123. Della Solfalara.).*
- ROSSI (DE) M. S. — Fenomeni aurorali e sismici della regione laziale confrontati coi terremoti di Casamicciola, Norcia, e Livorno. — *Boll. d. Vulc. Ital. N. 6, 7 e 8. Roma, 1875.*
- ROSSI M. S. (DE). — Comunicazione sulla questione dei segni precursori del terremoto di Casamicciola. — *Boll. Soc. Geol. II. 1883, Vol. II, pp. 217.*
- ROSSI M. S. (DE). — Comunicazione sul terremoto di Casamicciola. — *Boll. d. Soc. Geol. II. 1883, Vol. II, pp. 92.*
- ROSSINI (DE)-P. — Lettera sui terremoti di Monte Olivetto Maggiore. — (?)

- ROTH J. — Der Vesuv und die Umgebung von Neapel. — *Berlin*, 1857, in 8°, pp. XLIV+540, pl. IX.
- ROTH J. — Zur Geologie der Umgebung von Neapel. — *Gesammtsitz. Akad. Berlin*, 10 Nov. 1861, pp. 990-1006. (C. A.).
- ROZET. — Sur les volcans des environs de Naples. — *Bull. Soc. Géol. France*, 1844, 2.^e série, t. I, pp. 255-266. (C. A.).
- RUSCONI C. — L'origine atmosferica dei tufi vulcanici della campagna Romana. — 1865.
- RUSSEGER J. — Geognostische Beobachtungen in Rom. — *Neapel, am Actna, auf den Cyclophen, dem Vesuv, Ischia etc. Neues Jahrb. für Miner. Geogn. u. Geol. Bd. VIII, Stuttgart*, 1840.
- SACCHI G. BERTAZZI G. MARIENI L. — Sulla statistica del agro Acerrano e sulle memorie intorno alle acque minerali della Campania del dotto G. Caporali. — *Atti de Ateneo, Vol. XVII, Milano*, 1862.
- SAINTE-CLAIRE DEVILLE C. J. — Sur les émanations volcaniques des Champs Phlégréens. — *Compt. rend. d. l' Acad. d. Sc. Vol. LIV, Paris*, 1862. 3.^e lettre, 1865.
- SAINTE-CLAIRE DEVILLE C. J., LEBLANC F. ET FOUQUÉ F. — Sur les émanations à gaz combustibles qui se sont échappées des fissures de la lave de 1794 à Torre del Greco, lors de la dernière éruption du Vésuve. — *Compt. rend. d. l' Acad. d. Sc. Vol. LV, Paris*, 1862. *Id. Vol. LVI*, 1863.
- SANCHEZ G. — La Campania sotterranea, e brevi notizie degli edifici scavati entro Roccia delle Due Sicilie etc. — *Napoli 1833, vols 2, in 8°, pp. 2+656*.
- SANFELICE A. — Campania. — *Amsteladami*, 1656, in 12°, fol. 3, pp. 64, map 1, frontisp. (C. A.).
- SANFELICE A. — Campania notis illustrata. — *Neapoli*, 1726, in 4°, pp. 26+256, pl. 1. (C. A.).
- SANFELICE A. — La Campania recata in volgare italiano da Girolamo Aquino Capuano. — *Napoli*, 1796, in 8°, pp. LXXI+120, pl. 1, portrait. (C. A.).
- SANFELICII A. — De situ, ac origine Companiae, comprehendens, etc. etc. — *Lug. Bat. pp. 6-12*.
- SANTOLI V. M. — De Mephiti et vallibus Anxanti, libri 3. Cum observationibus super nonnullis urbibus Hirpinorum, quorum lapides ed antiquitatum reliquiae illustr. — *with 6 pl. fol. Nap. 1783. Parch.*
- SARIS A. DE — Termologio Puteolana a vantaggio dell'uomo infermo. — *Napoli*, 1800, in 8°, pp. XIV+192. (C. A.).
- SARNELLI P. — La vera guida de' forestieri curiosi di vedere e d'intendere le cose più notabili della Real Città di Napoli e

del suo amenissimo distretto, etc.—*Napoli*, 1685, in 12.^o pp. 22+3+8, numerous plates. 2.^d edit. *Nap.* 1752, in 12.^o pp. 302. 3.rd edit. 1788, in 12.^o pp. VIII+396, pl. 13. Several other editions.

SCACCHI A. — Della Voltaite, nuova specie di minerale trovato nella Solfatara di Pozzuoli. — *Antologia di Sc. Nat.* Vol. I, *Napoli*, 1841, in 8.^o, pp. 67-71.

SCACCHI A. — Notizie geologiche sulle conchiglie che si trovano fossili nell'Isola d'Ischia e lungo la spiaggia tra Pozzuoli e Monte Nuovo. — *Antol. di Scienze Naturali*, Vol. I (only) *Naples*, 1841, in 8.^o, pp. 33-48.

SCACCHI A. — Osservazioni critiche sul modo come fu seppellita l'antica Pompei. — *Lettera al Cav. Avellino*, *Boll. Archeol. Napolit.* N.^o 6. *Napoli*, marzo 1843.

SCACCHI A. — Sulla origine del tufo della Campania (in nota). — *Rend. della R. Acc. delle Scienze di Napoli*, fasc. III, 1842.

SCACCHI A. — Lezioni di Geologia.—*Napoli*, 1843, in 8.^o, pp. 178, From pp. 155 to 174: *Vulcani di Roccamonfina, Campi ed Isole Flegree, M.^{te} Somma e Vesuvio*.

SCACCHI A. — Voltaïte und Periklase, zwei neue Mineralien; mit Bemerkungen von Kobell. — *München, Gelehrte, Anz* XVI, 1843, pp. 345-348, *Erdm. Journal für. prakt. Chemie*, XVII, 1843, pp. 486-489.

SCACCHI A. — Notizie geologiche dei vulcani della Campania estratte dalle Lezioni di geologia. — *Napoli*, 1844, in 8.^o.

SCACCHI A. — Campi ed Isole Flegree, etc. — See: *Napoli e i luoghi celebri delle sue vicinanze* II vols. *Napoli*, 1845, in 4.^o, pp. 361-413.

SCACCHI A. — Descrizione delle carte geologiche dei Campi Flegrei. — *Atti della Settima Adunanza degli Scienziati Italiani tenuta in Napoli*, 1845. Seconda Parte, *Napoli*, 1846, pp. 1176-1181, pl. 2.

SCACCHI A. — Notice sur le gisement et sur la cristallisation de la Sodalite des environs de Naples. — *Ann. d. Mines.* 4.^{me} Sér. Vol. XII, *Paris*, 1847, pp. 385-389, figs. 11-14 of pl. 3.

SCACCHI A. — Memorie geologiche sulla Campania. — *Napoli*, 1849, in fol. pp. 131, pl. 4. *Rend. d. R. Acc. d. Sc. Fis. e Mat. Napoli*, Vol. VIII, 1849, pp. 41-65, 115-140, 234-261, pl. 3, 317-335. Vol. IX, 1850, pp. 84-114, pl. 1. *Zeitschr. d. Deuts. geol. Gesell.* Bd. IV, *Berlin*, 1852; *Journ. für prakt. Ch.* Bd. LV, *Leipzig*, 1852.

- SCACCHI A. — Osservazioni di fenditure aperte nelle pianure di Aversa il 21 settembre 1852. — *Lettera al Sig. A. Perrey. 1852 ? (Original M. S. in C. A.)*.
- SCACCHI A. — Ueber die Substanzen die sich in den Fumarolen der Phlegreischen Feldern bilden. — *Abdruck a d. Zeitschr. d. deutschen geologischen Gesellschaft, Bd. IV, 1852, pp. 162-189, figs. 1-6 of pl. 3.*
- SCACCHI A. — La regione vulcanica fluorifera della Campania. — *Atti Acc. Sc. Napoli, S. II, Vol. II, Napoli, 1885, pl. 3. Annali Soc. It. Sc. (1880-81-82). Mem. Mat. Fis. Soc. It. Sc. Ser. 3^a, T. VI, Napoli, 1887, pp. XV-XXV.*
- SCACCHI A. — Notizie delle fenditure apertesi nella pianura di Aversa nell'autunno del 1852 e del piperno per le medesime messo allo scoperto. — *Rend. d. R. Acc. d. Sc. Fis. Mat. Anno XX, Napoli, 1881, pp. 159-161.*
- SCACCHI A. — Notizie preliminari intorno ai proietti vulcanici del tufo di Nocera e di Sarno. — *Trans. d. R. Acc. dei Lincei 1881, Vol. V, Ser. 3^a, pp. 270-273.*
- SCACCHI A. — Breve notizia dei vulcani fluoriferi della Campania. — *Rend. R. Accad. Sc. Fis. Mat. Ann. XXI, 1822, pp. 201-204. Annali Soc. It. Sc. (1878-79). Mem. Mat. Fis. It. Sc. Ser. 3^a, T. IV, Napoli, 1882, pp. XIII-XX.*
- SCACCHI A. — Sul legno carbonizzato del tufo di Lanzara. — *Rend. R. Accad. Sc. Fis. Mat. An. XXI, 1882, pp. 176-182.*
- SCACCHI A. — Il vulcanetto di Puccianello. — *Rend. Acc. Sc. Fis. e Mat. S. 2^a, Vol. II, n. 12^o, Napoli, 1888, Ser. 2^a, N.° 7, pp. 471-480, pl. 4.*
- SCACCHI A. — Seconda appendice alla memoria intitolata: La regione vulcanica fluorifera della Campania. — *Rend. Acc. Sc. Fis. e Mat. S. 2^a, Vol. II, An. XXVII. Napoli, 1888, pp. 130-133.*
- SCACCHI A. — Sulle ossa fossili trovate nel tufo dei vulcani fluoriferi della Campania. — *Atti R. Acc. Sc. Fis. e Mat. S. 2^a, Vol. III, n. 3^o. Napoli, 1888. pp. 2.*
- SCACCHI A. — La regione vulcanica fluorifera della Campania. Seconda edizione etc. — *Mem. R. Com. Geol. d'It., Vol. IV, Pt. 1^a, Florence, 1890, Fol. I, pp. 48, pl. 4. (C. A.).*
- SCHAFHÜLT C. E. — Ueber den gegenwärtigen Zustand des Vesuv und sein Verhältniss zu den Phlegreischen gefielden. — *Gel. Anz.; heransgeg v. Mitgl. d. Königl. Bayer. Akad. d. Viss. Bd. XX, München, 1845.*
- SCHIAVONI F. — Relazione all'Accademia Pontaniana intorno allo

- studio delle Maree compiuto sul litorale di Napoli per dedurre il livello medio del mare. — *Napoli, 1867, in fol. pl. 8.*
- SCHMIDT J. — Die Eruption des Vesuv in Mai 1855. « Nebst beiträgen zur Topographie des Vesuv, der Phlegräischen Crater Roccamonfina und der alten Vulkane in Kirchenstaate. — *Wien, 1856, in 8°, pp. 212, with figs.* (C. A.).
- SCHMIDT J. — Nove Höhen « Bestimmungen am Vesuv, in den phlegräischen Feldern, zu Roccamonfina und in Albaner gebirge. — *Wien, 1856, in 4°, pp. 41.* (C. A.).
- SCHULTZ A. W. F. — Die Heilquellen bei Neapel. — *Berlin, 1837.*
- SCIVOLETTO P. — 1870. — *See Luca (de) S.*
- SCROPE (POULETT) G. — Notice on the geology of the Ponza Isles (1824). — *Trans. of the Geol. Soc. of London, Vol. II, London, 1829. Zeitschr. für Mineral. Bd. V. Frankfurt am Mein, 1829.*
- SCROPE (POULETT) G. — On the volcanic district of Naples. (1827). — *Proceedings of the Geol. Soc. of London. Vol. I, 1826-33. — Trans. of the geol. Soc. of London, Vol. II, London 1829. — Zeitschr. für Mineralogie, Bd. V, Frankfurt am Mein, 1829. Bull. d. Sc. Nat. et d. Géol. T. XIV, pp. 312-414.*
- SEMENTINI L. ET VULPES. — Analyse des eaux minérales de Castellamare. — *Journ. d. Ch. Médic., d. Pharm. etc. Vol. I Paris, 1835. — Ann. d. Ch. und Pharm. Bd. XV, Lemgo und Heidelberg, 1835.*
- SEMENTINI, VOLPE E CASSOLA. — Analisi e proprietà medicinali delle acque minerali di Castellamare. — *Napoli, 1834.*
- SEMMOLA G. — Delle Mofete del lago di Agnano. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. Vol. VI, Napoli, 1846. Ann. d. Ch. Vol. VI, Milano, 1848.*
- SEMMOLA M. — Analisi chimica delle acque potabili dei dintorni del Vesuvio e del Somma. — *Napoli, 1857.*
- SERPIERI A. — Il terremoto dell'isola d'Ischia del 28 Luglio 1883. — *Rimini, 1883, in 8°, pp. 14.* (C. A.).
- SIANO (DE) F. — Brevi e succinte notizie di storia naturale e civile dell'isola d'Ischia. — *? in 8°, pp. V+106.* (C. A.).
- SPADA-LAVINI A. — Passage du Mémoire de M. C. Puggaard sur la presqu'île de Sorrento. — *Bull. d. l. Soc. Géol. de France. Vol. XV, Paris, 1857-58.*
- SPADA-LAVINI A. — Sur l'âge des tufs de l'île d'Ischia. — *Bull. d. l. Soc. Géol. d. France. Vol. XV, 2^e Sér. Paris, 1858.*
- SPALLANZANI L. — Travels in the Two Sicilies and some parts

- of the Apennines. — *Translated from the Original Italian. 4 vols. with 11 plates. London, 1798.*
- SWAINE. — 1832. — *See Taylor.*
- TARCAGNOTA G. — Del sito et lodi della città di Napoli. — *Napoli, 1566, in 8°, fol. 12+174. (C. A.).*
- TAYLOR A. AND SWAINE. — An account of the grotta del Cane; with remarks on suffocation by carbonic acid.—*The Med. and Phys. Journ. Vol. LXVIII, London, 1832 — Notizen aus dem Gebiete der Natur. und Heilkunde. Bd. XXXVI, Erfurt und Weimar, 1833.*
- TCHIHATCHEFF (DE) P. — Coup d'œil sur la constitution géologique des provinces méridionales du Roy. de Naples et observations sur les environs de Nice. Avec carte Géologique de S. Germano (Cassino) jusqu'à l'extrémité méridionale de la Calabre. — *Berlin, 1842.*
- TELLSI BERNARDINI CONSENTINI. — De hisquae in Aere fiunt, et de terraemotibus. Liber unicus. — *Neapoli, 1570, in 4°, fol. 13. (C. A.).*
- TENORE M. — Cenno sulla Geografia fisica, e botanica del Regno di Napoli.— *Napoli, 1827, in 8°, pp. 121+II Geograph. maps.*
- TENORE M. — Relazione del Viaggio fatto in alcuni luoghi di Abruzzo Citeriore nella state del 1831. — *Napoli, 1832, in 8°. pp. 132, Geographical map.*
- TENORE M. — Ragguagli di alcune peregrinazioni effettuate in diversi luoghi della provincia di Napoli e di Terra di Lavoro nella primavera e nell'estate del 1832. — *Il Progr. d. Sc. etc. Vol. IV, V, VI, Napoli, 1833, in 8°, pp. 84.*
- TENORE M. — Intorno ad un passo degli « Elementi di Geologia » del Sig. Lyell relativo al Serapeo di Pozzuoli. — *Rend. d. R. Acc. d. Sc. Fis. e Mat. Vol. I, Napoli, 1842.*
- TENORE M. — Polvere caduta in Napoli colla pioggia nella notte del 9 al 10 novembre 1842. — *Ann. d. Fis. e Ch. etc. Vol. XI, Torino, 1843.*
- THOMPSON G. — Breve notizia di un viaggiatore sulle incrostazioni silicee termali d'Italia e specialmente di quelle dei Campi flegrei. — *Without d. or l. Napoli, 1795, in 8°, pp. 35. (O. V.).*
- THOMPSON G. — Topografia fisica della Campania. — (?).
- TISSANDIER. — Le tremblement de terre d'Ischia du 28 juillet 1883. Rapport de la Commission. — *La Nature, 1885, I, pp. 91-94, map 1.*
- TOLEDO (DA) P. — Ragionamento del terremoto del nuovo Monte etc. nell'anno 1538. — *Napoli, 1539, in 4°, fol. 16, pl. 1.*

- TOLEDO (A) P. JACOBI. — De Puteolani aeris natura, epistola. — *Napoli, 1544, fol. 4. (C. A.).*
- TONDI M. — Catalogo delle collezioni orittologica ed oreognostica del fu prof. M. Tondi. — *Napoli, 1837.*
- TORCIA M. — Tremblement de terre du 5 Janvier 1783 — ?
- TRIBOLET (DE) M. — Ischia et Java en 1883. — *Conférence académique, Neuchâtel, 1884.*
- TURLERI H. — De peregrinatione et Agro Neapolitano. Lib. II. Omnibus peregrinantibus utiles ac necessarii: ac in eorum gratium nunc primum editi. — *Argentorati, 1574, in 8°. See pp. 85-86. (B. N.).*
- URSI J. B. — Inscriptiones. — *Napoli, 1642, in fol., fol. 11, pp. 350. See pp. 14, 24, 26, 39, 99, 100, 101, 111, 331, 332, 333, 334, 386. — (C. A.).*
- VALENZIANI M. — Indice spiegato di tutte le produzioni del Vesuvio, della Solfatara e d'Ischia. — *Napoli, 1783, in 4°, pp. LII + 135. (C. A.).*
- VALPES. — 1834. — *See Sementini.*
- VELAIN C. — Le tremblement de terre d'Ischia du 28 juillet 1883. — *La Nature, 1883, II, pp. 183-187, pl. 2, map 2.*
- VELAIN C. — Les cataclysmes volcaniques de 1883; Ischia, Krakatao, Alaska. — *Bull. Hebd. N.º 288 et 289, Oct. 1885 de l'Assoc. Sc. d. France. Paris, 1885, in 8°, pp. 27 et figs, (C. A.).*
- VERDE M. E REALE N. — Dell'analisi chimica di una nuova acqua termo-minerale nel comune di Forio d'Ischia, prec. da una descriz. natur dell'isola. — *Napoli, 1866.*
- VETRANI A. — Sebethi vindiciae, sive dissertatio de Sebethi antiquitate, nomine, fama, cultu, origine, prisca magnitudine, decremento, atque alveis, adversus Jacobum Martorellium. — *Neapoli, 1766, in 8°, pp. 8 + 213, pl. II.*
- VILLAMENA F. — Ager Puteolanes, sivè prospectus eiusdem insigniaries. — *Roma, 1652, in 4°, pl. 24. (C. A.).*
- VILLANO G. (NAP). — Le croniche dell'inclita città di Napoli con li bagni di Pozzuoli et Ischia. — *In Raccolta di varii libri ovvero opuscoli d'istorie del Regno di Napoli. Napoli, 1690, in 4°, pp. 120. (C. A.).*
- VIRGILIO G. — I Campi Flegrei. Ricordanze. — *Napoli, 1877, in 4°, pp. 24. (C. A.).*
- VIZIOLI F. — Intorno le acque minerali del golfo di Napoli. — *Notizie. Dal Morgagni. Napoli, giugno 1869.*
- VOLPE. — 1835. — *See Sementini.*

- WALTHER J. — I vulcani sottomarini del Golfo di Napoli.—(*Boll. Com. Geol.*, 9-19). *Roma*, 1886, pp. 360-370, pl. 1.
- WALTHER J. AND SCHIRLITZ P. — Studi Geologici sul golfo di Napoli. — *Boll. Com. Geol. It.*, 1886, pp. 383-396.
- WALTHER J. AND SCHIRLITZ P. — Studien zur Geologie des Golfes von Neapel. — *Zeits. d. Geol. Gesells.*, Bd. 38, pp. 295-342.
- WATERS A. W. — Remarks on the recent geology of Italy suggested by a short visit to Sicily, Calabria and Ischia.—*Trans. of the Geol. Soc. Vol. XIV, Manchester*, 1877.
- WEBER C. — De Agro et vino Falerno. — *Marburgi*, 1855.
- WENTRUP F. — Der Vesuv und die Vulkanische Umgebung Neapels. — *Wittemberg*, 1860.
- WERTHER. — Ein Ausflug zur Solfatara bei Pozzuoli. — *Schrift. d. K. ph.oecko n. Gesell. Koenigsberg*, X Jahr. 1869.
- WOLF H. — Suite von mineralien aus dem vulcanischen gebiete Neapels und Siciliens. — *Verb. d. K. K. geol. Reichsanst. Wien*, 1870.
- YOUNG — The gas of the grotta del Cane near Naples. — *Journ. of the Ch. Soc. London*, 1878.
- ZINNO S. — Sulle industrie delle rocce e minerali dei campi Flegrai. — *Il Piria, Ann. I, N.º 2, Napoli*, 1872.
- ZINNO S. — Nuova analisi delle acque minerali delle terme Manzi in Casamicciola d'Ischia, con brevi riflessioni del dott. B. Paoni. — *Napoli*, 1880.





ROCCAMONFINA

AND

SUJO

- ABICH H. — Ueber Erhebungskatere und der Volcan von Roccamonfina. — *Berlin*, 1841.
- ANDREA D. — Anno Domini 1688. Immani Terremotu Furente Munimen Hoc Concussus; etc. — *A photograph in my own collection of a fresco inscription at Sessa Aurunca of 1693.*
- BREISLAK S. — Topografia fisica della Campania. — *Firenze*, 1798, in 8°, pp. XII+368+III pl. (See pp. 69 to 104.)
- BUCCA L. — Il monte di Roccamonfina, studio petrografico. — *Boll. Com. Geol.*, 7-8. *Roma*, 1886, pp. 245-266.
- CASORIA. — Analisi delle acque di Sujo. — *See Roccatagliata.*
- FERRERO L. O. — Sopra i Metamorfismi chimici che le rocce esistenti nei pressi delle acque di Sujo presentano, in dipendenza delle mofete e sorgive locali. — *See: Roccatagliata, Analisi, etc. pp. 21-45.*
- FERRERO L. O. — Cenni stratigrafici e geologici sul luogo di Sujo, — *Ibid. pp. 47-51.*
- FERRERO L. O. — Analisi delle più rinomate acque minero-termali di Sujo. — *Ibid. pp. 65-99.*
- FUSCO M. DE. — Le acque di Sujo sulla sponda destra del Gari-gliano. — *Il Movimento Medico-Chirurgico*, An. XVI, fasc. 5-6 *Napoli*, 1884, pp. 7.

- FUSCO M. DE. — Le acque di Sujo. — *Napoli*, 1889, in 8°, pp. 8. (*Chiefly medical*).
- GATTULA. — Hist. Abbatiae Cassinensis. — *See T. II, p. 759*.
- JERVIS G. — Tesori sotterranei dell'Italia. — *IV Vols.* in 8°, Torino, 1874-1888, numerous plates.
- JOHNSTON-LAVIS. H. J. — The Relationship of the Structure of Igneous Rocks to the Conditions of their Formation. — *Scientif. Proceed R. Dublin Soc., Vol. V. 1886, N. S., pp. 112-156*.
- JOHNSTON-LAVIS. H. J. — Viaggio scientifico alle regioni vulcaniche italiane nella ricorrenza del centenario del "Viaggio alle due Sicilie" di Lazzaro Spallanzani. (This is the programme of the excursion of the English geologists that visited the south Italian volcanoes under the direction of the author. It is here included as it contains various new and unpublished observations). — *Naples, 1889, in 8°, pp. 1-10*.
- JOHNSTON-LAVIS H. J. — Excursion to the South Italian Volcanoes. — *Proceed. Geol. Assoc. Lond. 1890, Vol. XI, N.º 8, pp. 389-423. See pp. 412-415*.
- MODERNI P. — Note geologiche sul gruppo vulcanico di Roccamonfina. — *Boll. Com. Geol. It. Roma, 1887, Vol. VIII, pp. 74-100, geol. map 1*.
- MONACO V. — Saggio Analitico ed uso Medico delle acque medicinali fredde e termali di Sujo in Terra di Lavoro. — *Piedimonte di Cassino?*, 1798.
- PEROTTA G. — Storia del Regno di Napoli. — *Napoli, 1837, in 4º*.
- PERROTTA G. — La Sede degli Aurunci antichissimi d'Italia, etc. etc. — *Napoli, 1737, in 4º, with portrait, pp. 33+366+15. From pp. 147 to 155. Tremuoto spaventevole da cui fu gravemente crollata la Rocca Monfina nell'anno 1728, etc.*
- PILLA L. — Geologia vulcanica della Campania. — *Napoli, 1823*.
- PILLA L. — Sur le groupe vulcanique de Rocca Monfina. — *Compt. Rend. d. l' Acad. d. Sc. Vol. X, Paris, 1840. — Ann. d. mines. Vol. XVIII, Paris, 1840. — Neues Jahrb. für Miner. Geol. Geogn. u. Petrefk. Bd. IX, Stuttgart, 1841*.
- PILLA L. — Analyse du Mémoire intitulé: Application de la théorie des cratères de soulèvement au volcan de Rocca Monfina, dans la Campania. — *Bull. Soc. Géol. France, 1842, pp. 402-403. (C. A.)*.
- PILLA L. — Applicazione della teorica dei crateri di sollevamento al vulcano di Rocca Monfina. — *Atti d. 3ª Riun. d. Sc. Ital. Firenze, 1841. — Mém. d. l. Soc. Géol. de France. — Vol. I, Paris, 1844*.
- PILLA L. — Sur quelques minéraux recueillis au Vésuve et à la

- Roccamonfina. — *Compt. Rend. Acad. Sc. Vol. XXI, Paris, 1845.*
- PILLA N. — Saggio litologico dei vulcani estinti di Rocca Monfina, Sessa e Teano. — *Napoli, 1795, in 8°, pp. XIII+77, maps 2.*
- PLINIUS. — Lib. 2, Cap. 103.
- RATH G. (VOM) — Zwei Gesteine der Rocca Monfina. — *Zeitschr. der Deuts. geol. Gesell. Berlin, 1873.*
- RICCIARDI L. — Sull' allineamento dei vulcani italiani, etc. — *Reggio-Emilia, 1887, in 8°, pp. 10, col. map. 1.*
- ROCCATAGLIATA P., FERRERO L. O., CASORIA. — Analisi delle acque Minero-Termali di Sujo in Provincia de Terra di Lavoro. — *Aversa, 1877, pp. 99 + 2, 4 col. pl. maps 2.*
- SCHMIDT J. — Die Eruption des Vesuvus in Mai 1855. — Nebst beiträgen zur Topographie des Vesuv, der Phlegräischen Crater, Roccamonfina und der alten Vulkane im Kirckenstaate. — *Wien, 1856, in 8°, pp. 212 with figs. (C. A.).*
- SCACCHI A. — Lezioni di Geologia. — *Napoli, 1843, in 8°, pp. 178, From pp. 155 to 174: Vulcani di Roccamonfina, Campi ed Isole Flegree, M. Somma e Vesuvio.*
- SCHMIDT J. — Neue Höhen-Bestimmungen am Vesuv, in den phlegräischen Feldern, zu Roccamonfina und in Albaner Gebirge. — *Wien, 1856, in 4°, pp. 41.*
- TARTARO E FIORILLO. — Analisi delle acque di Sujo. Società Economica della Provincia di Caserta. — ? 1866.
- TENORE G. — Ragguaglio di un breve viaggio geologico alla contrada vulcanica di Sessa e di Roccamonfina. — *Ann. d. Acc. d. Asp. Nat. Vol. II, Napoli, 1844.*
- WOLFFSOHN L. — Sujo on the Garigliano. — *Gentleman's Magazine, Sept. 1890 pp. 265-279. In Italian in L'Araldo. Giornale di Terra di Lavoro, Feb. e Marzo 1891.*
- ZARLENGA F. — Le Acque di Sujo? — *See: Filiale Sebezio, Settembre. 1852.*





ALBAN HILLS

- ABBATI (DEGLI) F. — Del suolo fisico di Roma e suoi contorni, sua origine e sua trasformazione. — *Cosenza*, 1865.
- ABICH H. — Geologische Beobachtungen über die vulcanischen Erscheinungen und Bildungen in Unter und Mittel-Italien. — *Braunschweig*, 1841.
- ANCA F. — Sull' elefante africano rinvenuto fra i fossili post-pliocenici presso di Roma. — *Atti della Reale Accademia dei Lincei*; vol. XXV, *Roma*, 1872.
- ANONYMOUS. — La Géologie de Rome. — *Revue Britannique*, N. 12, *Paris*, 1867.
- BAGLIVI G. — De terrae motu romano et urbium adjacentium anno 1703. Opera omnia medico-practico et anatomica. — *Lipsiae*, 1828, Vol. II, pp. 192-265. (C. A.).
- BARBIERI G. — I vulcani Cimino e Vulsinio. — *Viterbo*, 1877.
- BARLOCCI S. — Ricerche fisico-chimiche sul lago Sabatino e sulle sorgenti d'acque minerali che scaturiscono ne' suoi contorni. — *Roma*, 1816.
- BARLOCCI S. — Giornale arcadico di scienze, ecc.; vol. XLVI. — *Roma*, 1830.
- BARLOCCI S. — (Terza Edizione). — *Roma*, 1843.
- BELLEVUE (FLEURIAU DE). — Mémoire sur les cristaux microscop-

- piques et en particulier sur la séméline, la mélilite, la pseudo-sommitte et les selce-romano. — *Journal de physique, de chimie et de l'histoire naturelle*, par J. C. de Lamètherie et Ducrotay de Blainville, vol. LI, Paris, 1800.
- BLEICHER (DR.). — Essai d'une monographie géologique du Mont sacré — *Bulletin de la Société d'Histoire naturelle de Colmar*; 2^e. année, Colmar, 1861.
- BLEICHER (DR.). — Recherches géologiques faites dans les environs de Rome. — *Bulletin de la Société d'Histoire naturelle de Colmar*; 6^e. année, Colmar, 1865.
- BLEICHER. — Sur la géologie des environs de Rome. — *Bull. d. l. Soc. Géol. d. France*. 2.^e Sér. vol. XXIII, Paris, 1866.
- BONWICK J. — The volcanic rocks of Roma and Victoria compared. — *Victoria Roy. Soc. Trans.* Vol. VII, 1866, Melbourne, 1866.
- BORKOWSKY (S. DUNIN) — Geognostische Beobachtungen in der Gegend von Rom. — *Taschenbuch für die gesamte Mineralogie*, von K. C. Leonhard; vol. X, Frankfurt-am-Main, 1816.
- BREISLAK SC. — Voyages physiques et lythologiques dans la Campanie, suivis d'une mémoire sur la constitution physique de Rome. — Paris, 1801.
- BROCCHI G. B. — Sopra una sostanza fossile contenuta nella lava di Capo di Bove presso Roma. — *Giornale di fisica, chimica e storia naturale*, diretto da L. Brugnatelli; 1^a serie, vol. VI, Pavia, 1814.
- BROCCHI G. B. — Catalogo ragionato di una raccolta di rocce disposte con ordine geografico per servire alla geognosia d'Italia. — Milano, 1817.
- BROCCHI G. B. — Osservazioni sulla corrente di lava di Capo di Bove presso Roma e su quella delle Fratricchie sotto Albano. — *Biblioteca Italiana, ossia Giorn. di lett., scienze, ecc.*; vol. VII, Milano, 1817.
- BROCCHI G. B. — Risposta a una lettera del sig. Riccioli intorno all'olivina della lava basaltina di Capo di Bove — *Biblioteca Italiana, ossia Giorn. di Lett. scienze, ecc.*; vol. VIII, Milano, 1817.
- BROCCHI G. B. — Dell'antica condizione della superficie del suolo di Roma. — Roma, 1820.
- BROCCHI G. B. — Dello stato fisico (geologico) del suolo di Roma e carta fisica geologica del medesimo. — Roma, 1820.
- BROCCHI G. B. — Dello stato fisico del suolo di Roma ad illustrazione della carta geognostica di questa città. — Roma, 1820.

- BROCCHI G. B. — Memoria sopra la storia fisica del bacino di Roma. — *Ann. d. Sc. Fis. e Mat. Roma*, luglio, 1850.
- BROGNIART A. — On the freshwater formation of the environs of Rome (Translation). — *The Philos. Magaz. or Ann. of Chem. Mathem. Astron. Nat. Hist. and general Sc.*; by R. Taylor and R. Phillips, Vol. II, London, 1827.
- BUCH (L. VON). — Geognostische Uebersicht der Gegend von Rom. — *Neue Schriften der Gesellschaft naturforschender Freunde zu Berlin*; Vol. III, Berlin, 1801.
- CAPPELLO A. — Saggio sulla topografia fisica del suolo di Tivoli. — *Giorn. Accad. d. Sc. ecc. Vol. XXIII, Roma*, 1827.
- CAPPELLO A. — Reflexions géologiques sur les événements arrivés récemment dans le cours de l'Aniene. — *Bull. d. Sc. Nat. et d. Geol. par le Baron de Ferussac*, Vol. XVI, Paris, 1829.
- CAPPELLO A. — Riflessioni geologiche sugli avvenimenti recentemente accaduti nel corso dell'Aniene. — *Atti d. R. Acc. dei Lincei, Roma*, 1828. *Id. Giorn. Arcad. d. Letter. Sc. ecc. Vol. XXXV, Roma*, 1827. *Id. 2^a. ediz. Opusc. Scelti Scient. Roma*, 1830.
- CAPPELLO A. — Ulteriori schiarimenti intorno al fiume Aniene presso Tivoli. — *Giorn. Arcad. di letter. Sc. ecc. Vol. LX. Roma*, 1832.
- CARPI P. — Lettera al Brocchi contenente nuove notizie sulla corrente di lava di Capo di Bove. — *Biblioteca Italiana, ossia Giorn. di Lett., Scienze, ecc.*; Vol. VII. Milano, 1817.
- CARPI P. — Osservazioni chimico-mineralogiche sopra alcune sostanze che si trovano nella lava di Capo di Bove. — *Biblioteca Italiana, ossia Giorn. di Lett., Scienze, ecc.*; Vol. XXV, Milano, 1827.
- CARPI P. — Sopra un'antica corrente di lava scoperta nelle vicinanze di Roma. — *Giornale Arcadico di Scienze, ecc.*; Vol. XLI). Roma, 1829.
- CARLUCCI C. — Sulle condizioni fisiche e stato civile della provincia romana. — *Relazione esposta al consiglio superiore di sanità di Roma*). Roma, 1876.
- CAVAZZI A. — Analisi chimica completa della pozzolana di S. Paolo di Roma e della pozzolana delle maremme toscane. — *Bologna*, 1875.
- CERMELLI P. M. — Carte corografiche e memorie riguardanti le pietre, le miniere e i fossili, per servire alla storia naturale delle provincie del Patrimonio, Sabina, Lazio, Marittima, Campagna e dell'Agro Romano. — *Napoli*, 1782.
- CESELLI L. — Esposizione descrittiva ed analitica su i minerali

- dei dintorni di Roma, e della quiritina nuovo minerale. — *Corrispondenza scientifica in Roma; Vol. VII, n.º 30-31. Roma, 1866.*
- CESELLI M. — Tavola topografica e climatologica di Roma e sua campagna. — *Roma, 1875.*
- CESELLI M. — Sui prodotti minerali utili della Provincia Romana. — *Roma, 1877.*
- CESELLI M. — La Giovane Roma, rivista economica amministrativa, ecc.; anno II, n.º 17. — *Roma, 1877.*
- CESELLI M. — Giorn. Il Popolo Romano, anno V, n.º 246 e 248. — *Roma, 1877.*
- CESELLI M. — Sui prodotti minerali utili delle provincie romane. — *Giorn. Il Popolo Romano, N.º 246 e 248, Roma, 1877.*
- CLEMENT MULLER J. J. — Documents historiques et géologiques sur le lac d'Albano. — *Bulletin de la Soc. géol. de France, 2^e. Série, Vol. XI, Paris, 1853-54.*
- CLERICI E. — Il travertino di Fiano Romano. — *Boll. Com. Geol., 3-4. Roma, 1887.*
- CLERICI E. — La vitis vinifera, fossile nei dintorni di Roma. — *Boll. Soc. Geol., VI, 3. Roma, 1887.*
- CLERICI E. — Sopra alcuni fossili recentemente trovati nel tufo grigio di Peperino presso Roma. — *Boll. Soc. Geol., VI, 1, Roma, 1887.*
- CLERICI E. — Sopra i resti di castoreo finora rinvenuti nei dintorni di Roma. — *Boll. Com. Geol., 9-10, Roma, 1887.*
- COHN F. — Ueber die Entstehung des Travertin in den Wasserfällen von Tivoli. — *Jahrbuch für Miner. Geogn. Geol. und Petrefakt. von Leonhard und Bronn. Stuttgart, 1864.*
- CONDAMINE (DE LA). — Extrait d'un journal de voyage en Italie. — (*Histoire de l'Académie R. des Sciences: Mém. de Mathématiques; année 1757, Paris, 1762.*)
- CONTARINI G. B. — Bibliografia geologica e paleontologica della provincia di Roma, pubblicata per cura del R. Ufficio Geologico. — *Roma, 1886, in 8º, pp. 116.*
- DAVIES W. — Pilgrimage on the Tiber, from mouth to source, with notices of his tributaries. — *London, 1873.*
- DEGLI ABBATI FR. — Del suolo fisico di Roma e suoi contorni, sua origine e trasformazione. — *Cosenza, 1869.*
- DELTA (PSEUD. FOR FORBES J. D.). — On the cold Caves of the monte Testaccio at Rome. — *The Edinburgh Journ. of Sc. exhib. a view of the Progr. of Discov. in Nat. Philos. Chem.*

- Min. Geol. etc. cond. by David Brewster, Vol. VIII, Edinburgh, 1828.*
- DELTA (PSEUD. FOR FORBES J. D.). — Observations on the style of buildings employed in Ancient Italy and the materials used in the city of Rome.—*The Edinburgh Journ. of Sc. Vol. IX, Edinburgh, 1828.*
- DEMARCHI L. — I prodotti minerali della provincia di Roma. — *Annali di Statistica; serie 3^a, vol. II. Roma, 1882.*
- DESOR E. — Compte rendu d'une excursion faite à une ancienne nécropole des Monts Albans, recouverte par un dépôt volcanique. — *Bull. d. l. Soc. d. Sc. Nat. d. Neuchâtel, Vol. XI, Cah. I, Neuchâtel, 1877.*
- DI SUCCI P. — Dell'antico e presente stato della campagna di Roma in rapporto alla salubrità dell'aria e alla fertilità del suolo. — *Roma, 1878.*
- DI TUCCI P. — Saggio di studi geologici sui peperini del Lazio.— *Atti della R. Acc. dei Lincei; Memorie della Classe di Sc. Fis. Mat. e Nat.; ser. 3^a, vol. VI, Roma, 1879.*
- ESCHINARDI F. — Descrizione di Roma e dell' Agro Romano. — *Roma, 1750.*
- FERBER J. J. — Briefe aus Welschland über natürliche Merkwürdigkeiten dieses Landes. — *Traduz. del barone Dietrich, Prag, 1773.*
- FLOTTES M. L. — Géologie des environs de Rome. — *Bulletin de la Soc. d'hist. nat. d. Toulouse: 13^e an., 3^e fasc. Toulouse, 1879.*
- FORBES J. — Ueber die Vulcane. — *Latiums, 1849.*
- FORBES J. D. — On the volcanic formation of Monte Albano. — *The Edinb. New phil. Journ., vol. XLVIII, Edinburgh, 1850.*
- FORBES J. D. — (In extract). — *Neus Jahrb. für Miner. etc., B. XIX, Stuttgart, 1851.*
- FORTIS G. B. — Dei vulcani spenti della Maremma Romana. — *Venezia, 1772.*
- FOUGEROUX DE BOUDAREY A. D. — Mémoire sur les solfatares des environs de Rome. — *Histoire de l'Acad. des Sciences. Mémoires de mathém.; année 1770, Paris, 1773.*
- FUCHS C. W. C. — Ueber die erlöschenen Vulcane in Mittel-Italien. — *Verhandl. des Naturhist. Medic. Vereins zu Heidelberg. III, Band, Heidelberg, 1862-63.*
- GATTI A. — Discorso sull' Agro Romano e cenni economico-statistici sullo stato pontificio. — *Roma, 1840.*
- GISMONDI C. — Osservazioni sopra alcuni particolari minerali dei

- contorni di Roma. — *Biblioteca Italiana, ossia Giorn. di Lett. sc. ed Arti*; Vol. V, Milano, 1817.
- GISMONDI C. — (Leonhard's Taschenbuch; B. XI). — *Stuttgart*, 1817.
- GIORDANO F. — Cenni sulla costituzione geologica della Campagna romana. — *Boll. d. R. Com. Geol. d' Italia, anno II. Firenze*, 1871.
- GIORDANO F. — Cenni sulle condizioni fisico-economiche di Roma e suo territorio — *Firenze*, 1871.
- GIORDANO F. — Condizioni topografiche e fisiche di Roma e Campagna romana (Monografia archeologica e statistica di Roma e della Campagna romana). — *Roma*, 1878.
- GMELIN L. — Observationes oryctognosticae et chimicae de Haenyna et de quibusdam fossilibus quae cum hac concreta inveniuntur, praemissis animadversionibus geologicis de montibus Latii veteris. — *Heidelbergae*, 1814.
- GMELIN L. — Oryctognostische und chemische Beobachtungen über den Haiyn und einige mit ihm vorkommenden Fossilien, neben geognostischen Bemerkungen über die Berge des alten Latiums. — *Journ. für Ch. und Phys. J. S. C. Schweigger. XV Band. Nürnberg*, 1815. — *Ann. of Philos. or Magaz. of Chem. Min. etc. by T. Thomson. Vol. IV, London*, 1814.
- GMELIN L. — Carte géologique des environs d'Albano. — *Tubingen*, 1816.
- GOSSELET G. — Observations géologiques faites en Italie. — *Mémoires de la Soc. Imp. des Sciences, de l'Agriculture et des Arts de Lille; 3^e série, Vol. 6. Lille*, 1869.
- HACQUET B. — Ueber Versteinerungen des ausgebrannten Vulkans bei Rom offenbar in dortigem Basaltuff. — *Leipzig*, 1780.
- HECKE (VAN DEN). — 1854. — *See Rayneval (De) A.*
- HESSENBERG F. — Haiyn von Marino am Albanergebirge bei Rom (Mineralogische Notizen von F. Hessenberg. Neue Folge, H. V). — *Frankfurt am Main*, 1868.
- HOFFMANN F. — Ueber die Beschaffenheit des römischen Bodens, nebst einigen allgemeinen Betrachtungen über den geognostischen Charakter Italiens. — *Annalen der Physik und Chemie, von J. C. Poggendorf; B. XVI. Leipzig*, 1829. *The Edinburgh Philosophical Journal, by Jameson: Vol. VIII, Edinburgh*, 1830.
- HOFFMANN F. — Ueber das Albaner Gebirge, den Aetna, den Serapis Tempel von Pozzuoli und die geognostischen Verhältnisse der Umgegend von Catania. — *Arch. für Min. Geogn. Bergbau und Huttenkunde von C. J. B. Karsten. III Band.*

- Berlin 1831. — The Edinburgh New Philos. Jouru. Vol. XII, Edinburgh, 1832.*
- HOFFMANN F.—Geognostische Beobachtungen, gesammelt auf einer Reise durch Italien und Sicilien in den Jahren 1830 bis 1832.—*Karsten's Archiv. für Min., Geogn., etc.; Bd. XIII. Berlin, 1839.*
- INDES (LES FRÈRES).—Sur la formation des tufs et sur une caverne à ossements des environs de Rome. — *Bull. de la Soc. Géolog. de France; 2^e Sér., vol. XXVI, Paris, 1869. 2^e édition — Béthune, 1875.*
- INDES (LES FRÈRES). — Sur la formation des tufs des environs de Rome — *Bull. de la Soc. géolog. de France; 2^e série, vol. XXVII, Paris, 1870. 2^e édition, Béthune, 1875.*
- JERVIS G. — The mineral resources of central Italy. — *London, 1862. — Id. — London, 1868.*
- JERVIS G. — I tesori sotterranei dell'Italia. Parte seconda: Regione dell'Appennino e vulcani attivi e spenti dipendentivi. — *Torino, 1874.*
- JOHNSTON-LAVIS H. J. — Viaggio scientifico alle regioni vulcaniche italiane nella ricorrenza del centenario del « Viaggio alle due Sicilie » di Lazzaro Spallanzani. (This is the programme of the excursion of the English geologists that visited the south Italian volcanoes under the direction of the author. It is here included as it contains various new and unpublished observations). — *Naples, 1889, in 8^o, pp. 1-10.*
- JUDD J. W. — The great crateric lakes of Central Italy — *The Geological Magazine, n. 134, London, 1875.*
- KARRER F. — Der Boden der Hauptstädte Europäs. Rome — *Wien, 1881.*
- KELLER F. — Contributo allo studio delle rocce magnetiche dei dintorni di Roma. — *Rend. Acc. Lincei, 1^a sem., Vol. V, 7. Roma, 1889.*
- KIRCHER A. — Latium idest nova et parallela Latii tum veteris, tum novi descriptio. — *Amestelaedami, 1671.*
- KLAPROTH M. H. — Chemische Untersuchung des krystallisirten schwarzen Augits von Frascati. — *Journal für die Chemie und Physik. von A. F. Gehlen; B. V, Berlin, 1808. — Annales de Chimie ou Recueil de Mémoires et les Arts qui en dépendent; Vol. LXVI. Paris, 1808 — Journal of Natural Philosophy, Chemistry, and the Arts, by W. Nicholson; Vol. XXXVII. — London 1810.*
- KLEIN C. — Beiträge zur Kenntniss des Leucits. — *Ibidem, Jahr. 1885, II B, Stuttgart, 1885.*

- KLEIN C. — Optische Studien am Leucit. — *Neus Jahrb. für Min., Geolog. etc.; III. Beil. B, Stuttgart, 1885.*
- KLITSCHÉ DE LA GRANGE A. — Sulla formazione dei tuffi vulcanici nell'Agro romano e nel Viterbese. — *Roma, 1884.*
- KOBELL (VON) I. — Ueber den Spadait, eine neue Mineral Species und über den Wollastonit von Capo di Bove. — *Gelehrte Anzeig. herausg. von Mitgliedern der Königl. Bajerischen Akad. der Wissensch. XVII Band, München, 1843. Journ. für prakt. Ch. von Otto Liné Erdmann, XXX Band. Leipzig 1844. Giorn. Arcad. d. Sc. ecc. Vol. XCIX, Roma, 1844.*
- LAPI G. G. — Lezione accademica intorno l'origine dei due laghi Albano e Nemorense. — *Roma, 1781.*
- LAPPARENT (DE). — 1869. — *See Dellese.*
- LARTEL ED. — Sur les débris fossiles de divers éléphants découverts aux environs de Rome. — *Bull. de la Soc. Géol. de France; 2^e série, vol. XV. Paris, 1857-58.*
- LUDWIG R. — Geologische Bilder aus Italien. — *Bull. de la Soc. Imp. des Naturalistes de Moscou; an. 1874, n. 1. Moscou, 1875.*
- MANTOVANI P. — Descrizione mineralogica dei Vulcani Laziali. — *Roma, 1868.*
- MANTOVANI P. — 1872. — *See Verneuil (de) E.*
- MANTOVANI P. — Descrizione geologica della Campagna romana. — *Torino, 1874.*
- MANTOVANI P. — Escursione fatta dalla sezione romana del Club alpino italiano al Monte Pila nell'aprile 1876. — *Corrispondenza scientifica in Roma; Vol. VIII, n. 29, Roma, 1876.*
- MANTOVANI P. — Is Man tertiary? The antiquity of Man in the Roman Country. — *Geol. Magaz. Vol. IV, 1877.*
- MANTOVANI P. — Descrizione geologica dei Monti Laziali. — *Annuario del R. Liceo E. Q. Visconti per l'anno scolastico 1876-77. Roma, 1878.*
- MANTOVANI P. — Uno sguardo alla costituzione geologica del suolo romano. — *Monografia Archeologica e Statistica della città di Roma e della Campagna romana. Roma, 1878.*
- MARTINORI E. — I vulcani laziali. (Rassegna di alpinismo; an. 2^o, n. 9). — *Rocca S. Casciano (Firenze), 1880.*
- MAURO FR. — Ricerche chimiche sulle lave di Montecompatri, del Tuscolo, di Villa Lancellotti e di Monte Pila. — *Atti della R. Acc. dei Lincei; Transunti, ser. 3, Vol. IV, fasc. 7, Roma, 1880.*
- MEDICI-SPADA (DE) L. — Sopra alcune specie minerali non in prima osservate nello Stato Pontificio. — *Racc. di lett. ecc. in-*

- torno alla Fis. ed alla Mat. d. C. Palumba. Vol. I. Roma, 1845.*
- MEDICI SPADA (DE) L. E PONZI G. — Profilo teorico dimostrante la disposizione dei terreni della Campagna romana. — *Roma, 1845.*
- MELI R. — Rinvenimenti d'ossa fossili nei dintorni di Roma. — *Boll. del R. Com. geol. d'Italia, Vol. XII, n.º 11-12. Roma, 1881.*
- MELI R. — Notizie ed osservazioni sui resti organici rinvenuti nei tufi leucitici della provincia di Roma. — *Boll. del R. Com. Geol. d'Italia; Vol. XXII, n.º 9-10. Roma, 1881.*
- MELI R. — Ulteriori notizie ed osservazioni sui resti fossili rinvenuti nei tufi vulcanici della provincia di Roma. — *Boll. del R. Com. geol. d'Italia; Vol. XIII, n.º 9-10 e 11-12. Roma, 1882.*
- MELI R. — Bibliografie riguardanti le acque potabili e minerali della provincia di Roma. — *Roma, 1885, in 8º, pp. 108.*
- MOROZZO (DI) C. L. — Sopra i denti fossili di un elefante trovato nelle vicinanze di Roma (1802) ed Analisi chimica di un dente fossile fatta dal dott. Morecchini. — *Memorie di Matematica e Fisica della Società Italiana delle Scienze; Vol. X, p. 1, Modena, 1803.*
- MORTILLET G. DE. — Géologie des environs de Rome. — *Atti della Società Italiana di Scienze Naturali, Vol. VI, Milano, 1864.*
- MURCHISON R. J. — Ueber die älteren vulkanischen Gebilde im Kirchenstaate, und über die Spalten welchen in Toscana heisse Dämpfe entsteigen und deren Beziehung zu alten Eruptionen und Brüche Linien. — *Stuttgart, 1851. In English, Quart Journ. Geol. Soc. Vol. VI, 1858, pp. 281-310.*
- NECKER L. A. (DE SAUSSURE). — Note sur la Gismondine de Carpi et sur un nouveau minéral (Berzeline) des environs de Rome. — *Bibliot. Universelle des Sciences; 1re s., Vol. XLV, Genève, 1831.*
- PENTLAND G. B. — On the geology of the country about Rome. — *London, 1859.*
- PERREAU L. — Il sottosuolo dell' Agro romano. — *Roma, 1884. nel giorn. Il Popolo Romano, A. XII, N. 339. — Roma, 1884.*
- PETRINI. — Gabinetto mineralogico del collegio Nazzareno. — *Roma, 1791.*
- PICCINI A. — Analisi di un' augite del Lazio delle vicinanze di Roma. — *Atti della R. Acc. dei Lincei; Trasunti, ser. 3, Vol. IV, fasc. 7, Roma, 1880.*

- PILLA L. — Osservazioni geognostiche che possono fare lungo la strada da Napoli a Vienna attraversando lo Stato romano, la Toscana, lo Stato veneto, la Carintia, la Stiria ed Austria. — *Napoli, 1831.*
- PONZI G. — 1843. — *See Medici Spada L.*
- PONZI G. — Osservazioni geologiche fatte lungo la Valle Latina da Roma a Monte Cassino. — *Atti dell' Accademia Pontificia dei Nuovi Lincei, anno I, Roma, 1848.*
- PONZI G. — Storia fisica del bacino di Roma. — *Atti d. Acc. Pontific. d. N. Lincei. Vol. II, Roma, 1849.*
- PONZI G. — Mémoire sur la zone volcanique d'Italie. — *Bulletin de la Soc. Géol. de France; 2^e série, Vol. VII, Paris, 1849-50.*
- PONZI G. — Sopra un nuovo cratere vulcanico nelle vicinanze di Roma. — *Atti d. Acc. Pontific. d. N. Lincei, Vol. IV, Roma, 1850-51.*
- PONZI G. — Descrizione della carta geologica della provincia di Roma. — *Atti d. Acc. Pontific. d. N. Lincei, Vol. IV, Roma, 1851.*
- PONZI G. — Sulla corrente di lava e sopra un nuovo cratere vulcanico nelle vicinanze di Roma. — *Atti dell' Accademia pontificia dei Nuovi Lincei, anno IV, Roma, 1851.*
- PONZI G. — Sopra un nuovo cono vulcanico rinvenuto nella Valle di Cona. — *Atti dell' Accademia pontificia dei Nuovi Lincei, anno V, Roma, 1852.*
- PONZI G. — Sulla Valle Latina. Appendice alla memoria pubblicata nella Sessione XVII del 31 dicembre 1848. — *Atti dell' Accademia pontificia dei Nuovi Lincei, anno IV, Roma, 1852.*
- PONZI G. — Descrizione della Carta geologica della Cormaca di Roma. — *Atti dell' Accademia pontificia dei Nuovi Lincei, anno VI, Roma, 1855.*
- PONZI G. — Sui terremoti avvenuti in Frascati nei mesi di maggio e giugno 1855. — *Atti dell' Accademia pont. dei Nuovi Lincei, anno VI, Roma, 1855.*
- PONZI G. — Nota sulla carta geologica della provincia di Frosinone e Velletri. — *Atti d. Acc. Pont. d. N. Lincei, Vol. XI, Roma, 1857-58.*
- PONZI G. — Sullo stato fisico del suolo di Roma. — *Giornale arcadico di scienze, ecc.; nuova serie, Vol. IX, Roma, 1858.*
- PONZI G. — Storia naturale del Lazio. — *Giornale Arcadico di Scienze ecc; nuova serie, Vol XII, Roma, 1858.*
- PONZI G. — Sulle correnti di lava scoperte dal taglio della ferro-

- via di Albano. — *Atti d. Acc. Pontif. d. N. Lincei, Vol. XII. Roma, 1858-59.*
- PONZI G. — Carta geologica dei Monti vulcanici del Lazio — *Atti d. Acc. Pont. d. N. Lincei, Vol. XIII. Roma, 1859-60.*
- PONZI G. — Storia geologica del Tevere. — *Giornale Arcadico di Scienze, ecc.; nuova serie, Vol. XVIII, Roma, 1860.*
- PONZI G. — Carta geologica dei monti vulcanici del Lazio. — (*Atti dell'Acc. Pont. dei Nuovi Lincei, anno XIII, Roma, 1861.*
- PONZI G. — Catalogo ragionato di una collezione di materiali da costruzione e di marmi da decorazioni dello Stato Pontificio. — *Roma, 1862.*
- PONZI G. — Sopra i diversi periodi eruttivi determinati nell'Italia centrale. — *Atti dell'Accad. pont. dei Nuovi Lincei, anno XVII, Roma, 1864.*
- PONZI G. — Quadro geologico dell'Italia centrale. — *Atti dell'Acc. pont. dei Nuovi Lincei, anno XIX, Roma, 1866.*
- PONZI G. — Memoria sulla storia fisica del bacino di Roma, da servire d'appendice all'opera: Il suolo fisico di Roma di G. B. Brocchi (Estratto dagli Annali di Sc. Matem. e Fisiche, pubbl. in Roma, luglio 1800). — *Atti dell'Acc. pont. dei Nuovi Lincei, anno XX, Roma, 1867.*
- PONZI G. — Le volcanisme romain. Remarques sur les observations faites en Italie par M. Gosselet. — *Bulletin de la Société géol. de France; 2^e série, Vol. XXVI, Paris, 1869.*
- PONZI G. — Storia fisica dell'Italia Centrale. — *Atti della R. Acc. dei Lincei, Vol. XXIV, Roma, 1871.*
- PONZI G. — Carta geologica del bacino di Roma. — *Bollettino della Società geografica italiana, Vol. VIII, Roma. 1872.*
- PONZI G. — Del bacino di Roma e della sua natura. — *Annali del Ministero d'Agr., Ind. e Comm. Firenze-Genova, 1872.*
- PONZI G. — Les relations de l'homme préhistorique avec les phénomènes géologiques de l'Italie centrale. — *Comptes rendus du Congrès international d'anthropologie, etc., 1871. Session V, Bologne, 1873.*
- PONZI G. — Il bacino di Roma (In the collection entitled: Studi sulla geografia naturale e civile d'Italia.) — *Roma, 1875.*
- PONZI G. — Storia dei vulcani laziali. — *Atti della R. Acc. dei Lincei, serie 2^a, vol. I, Roma, 1875.*
- PONZI G. — Sulle epoche del vulcanismo italiano. — *Atti d. R. Acc. d. Lincei, Vol. II, fasc. I, Transunti, Roma, 1878.*
- PONZI G. — I tufi vulcanici della Tuscia romana. — *R. Acc. d. Lincei, Ann. CCLXXVIII (1880-81). Ser. 3^a, Mem. d. Class. d. Sc. Fis. Mat. e Nat. Vol. IX. Roma, 1881.*

- PONZI G. — Sui tuffi vulcanici della Tuscia Romana a fine di togliere qualunque discordanza di opinione emessa sulla loro origine, diffusione ed età. — *Atti d. R. Acc. d. Lincei, Ser. 3^a, Trans. Vol. V, Roma, 1881.*
- PONZI G. — Intorno alla sezione geologica scoperta al Tavolato sulla via Appia Nuova, nella costruzione del tramway per Marino, con una nota dell'ing. R. Meli, sulle fenditure delle mura del Pantheon — *Atti della R. Acc. dei Lincei; Mem. della Classe di Sc. Fis. Mat. e Nat.; Serie 3^a, Vol. XII, Roma, 1882.*
- PONZI G. — Sulle ossa fossili rinvenute nella cava dei tuffi vulcanici della Sedia del Diavolo sulla via Nomentana presso Roma. — *Boll. del R. Comitato geologico d'Italia, Serie 2^a, vol. VI, n. 3-4, Roma, 1883.*
- PONZI G. — Conglomerato del Tavolato; pozzo artesiano nella lava di Capo di Bove, storia dei vulcani laziali accresciuta e corretta. — *Atti della R. Acc. dei Lincei; Mem. della classe di Sc. Fis. Mat. e Nat.; serie 4^a, vol. I, Roma, 1885.*
- PONZI G. — Contribuzione alla geologia dei Vulcani Laziali sul cratere tuscolano. — *Atti della R. Acc. dei Lincei, Rendiconti, serie 4^a, vol. I, Roma, 1885.*
- PONZI G. E MELI R. — Molluschi fossili del Monte Mario presso Roma. — *Mem. Acc. Lincei, S. IV, vol. III, Roma, 1887.*
- PROCACCINI RICCI V. — Descrizione metodica di alquanti prodotti dei vulcani spenti nello Stato Romano. — *Firenze, 1820.*
- PROCACCINI RICCI V. — Viaggio ai vulcani spenti dello Stato Romano. — *Firenze, 1821-24.*
- RATH (G. VOM). — Mineralogische-geognostische Fragmente aus Italien. I, Rom und die römische Campagna. — *Zeitschrift der deutsch. geolog. Gesellschaft, B. XVIII, Berlin, 1866.*
- RATH (G. VOM). — Mineralogische-geognostische Fragmente aus Italien II. Das Albaner Gebirge. — *Zeitschrift der deutsch. geolog. Gesellschaft, B. XVIII, Berlin, 1866.*
- RICCIARDI L. — Sull'allineamento dei vulcani italiani, etc. — *Reggio-Emilia, 1887, in 8^o, pp. 10, col. map. 1.*
- RICCI VITO PROCACCINI. — Viaggi ai Vulcani spenti d'Italia nello stato Romano verso il Mediterraneo. — *Vol. 2, in 8^o, Firenze, 1814. (O. V.).*
- RIGACCI C. — L'origine atmosferica dei Tuffi vulcanici della campagna romana trovata dall'Abate Carlo Rusconi il dì 11 novembre 1864. — *Roma, 1865.*
- ROSSI (DE) M. S. — Analisi geologica ed architettonica delle ca-

- tacombe di Roma (Nota inserita nell' opera di G. B. De Rossi intitolata " Roma Sotterranea " Vol. I. — *Roma*, 1864.
- ROSSI (DE) M. S. — Etudes géologico-archéologiques sur le sol Romain. — *Bull. d. l. Soc. géol. d. France*, 2^e Sér. Vol. XXIV, *Paris*, 1867.
- ROSSI (DE) M. S. — Saggio degli studii géologico-archeologici fatti nella Campagna Romana. — *Roma*, 1867.
- ROSSI (DE) M. S. — (In estratto nella Zeitschrift der deuts. geol. Gesellschaft. B. XXII). — *Berlin*. 1870.
- ROSSI (DE) M. S. — Nuova ed importante scoperta fatta nella necropoli preistorica dei Colli Albani coperta dalle eruzioni del Vulcano Laziale. — *Giorn. " L' Opinione "* N.º 12, *Roma*, 1871.
- ROSSI (DE) M. S. — Le fratture vulcaniche laziali ed i terremoti del genn. 1873. — *Atti d. Acc. Pont. d. N. Lincei. Ann. XXVI, Sess. II, Roma*, 1873.
- ROSSI (DE) M. S. — Intorno al seppellimento vulcanico della necropoli ed abitazioni albane. — *Bull. d. Vulcano Ital. Ann. I, fasc. VIII, Roma*, 1874.
- RUSCONI C. — Sulla origine atmosferica dei tufi vulcanici della Campagna romana. — *Corrisp. Scient. in Roma per lo avanz. d. Sc. ecc. Vol. VII, N. 19-20. Roma*, 1865. — *Bull. d. l. Sc. géol. de France*, 2^e Sér. Vol. XXII, *Paris*, 1865.
- RUSCONI C. ET MORTILLET G. (DE). — Sur l'âge des tufs volcaniques de la Campagne de Rome. — *Bulletin de la Soc. géol. de France; 2^a Série, Vol. XXII, Paris*, 1865.
- RUSCONI C. — Nuovo deposito di ossa fossili trovato nella Campagna romana. — *Corrispondenza scientifica in Roma; Vol. VII, n. 38, Roma*, 1867.
- RUSSEGGER J. — Geognostische Beobachtungen in Rom, Neapel, am Aetna, auf den Cyclophen, dem Vesuv, Ischia ecc. — *N. Jahrb. f. Miner., Geogn., Geol. und Petrefsk. von Leonhard und Bronn. VIII, Band. Stuttgart*, 1840.
- SALMON U. P. — Mémoire sur un fragment de basalte volcanique tiré de Borghetto, territoire de Rome. — *Rome*, 1799.
- SAUSSURE (NECKER DE) L. A. — Note sur la gismondine de Carpi et sur un nouveau minéral (Berzeline) des environs de Rome. — *Bibl. Univ. des Sc. Belles lett. et Arts, faisant suite à la Bibl. Britann. rédigée à Genève. Part. d. Sc. 1^e Sér. Vol. XLV, Genève*, 1831.
- SCACCHI A. — I composti fluorici dei vulcani del Lazio. — *Rend. Acc. Sc. Napoli, Ser. II, Vol. I, II, Napoli*, 1887.
- SCHMIDT J. T. Y. — Die Eruption des Vesuvs in ihren Phänomae-

- nen in Maj 1855, nebst. Ansichten und Profilen der Vulkane des phlegräischen Gebietes, Roccamonfina's und des Albaner Gebirges. — *Wien und Olmütz*, 1856.
- SESTINI F. — Studio sui tuffi della Campagna romana. — *Bollettino del Comitato agrario di Roma; anno IV, n. 4. Roma*, 1873.
- SESTINI F. — Analisi diverse. Travertino della Campagna romana; minerale manganesifero di Subiaco. — *Boll. d. Com. Agr. d. Roma. N. 3-4. Roma*, 1874.
- SICKLER F. CH. L. — Pantogramme ou vue descriptive générale de la Campagne de Rome. — *Rome*, 1821.
- SICKLER F. CH. L. — Plan topographique de la Campagne de Rome, considérée sous les rapports de la géologie et des antiquités. — *Rome*, 1821.
- SILLIMAN B. (JUNIOR). — Miscellaneous notes from Europe: 1° Present condition of Vesuvius; 2° Grotta del Cane and Lake Agnano; 3° Sulphur Lake of the Campagna, near Tivoli; 4° Meteorological observatory of Mount Vesuvius; 5° Light for illumination obtained from the burning of hydrogen. — *The Amer. Journ. of Sc. and Arts; by B. Silliman, and Dana. Vol. XII, 2^a Ser. New-Haven*, 1851.
- SPADONI P. — Osservazioni mineralo-vulcaniche fatte in un viaggio per l'antico Lazio. — *Macerata*, 1802.
- STRÜVER G. — Ueber das Albaner Gebirge und über Somma Bomben mit der schönsten zonen-Structur. — *Neues Jahrb. für Min., Geol. und Palaeont., von G. Leonhard und H. B. Geinitz; Jahrg. 1875, Stuttgart*, 1875.
- STRÜVER G. — Ueber die erste Abtheilung seiner Studien über die Mineralien des Albaner Gebirge. — *Neues Jahrb. für Min., Geol. und Palaeont., von G. Leonhard, und H. B. Geinitz; Jahrg. 1876, Stuttgart*, 1876.
- STRÜVER G. — Studi sui minerali del Lazio. Parte 1.^a e 2.^a — *Atti d. R. Acc. dei Lincei; Memorie della classe di Scienze Fis. Mat. e Nat., serie 2^a, Vol. III e serie 3^a, Vol. I Roma*, 1876 e 1877.
- STRÜVER G. — Studi petrografici sul Lazio. — *Atti della R. Acc. dei Lincei; Memorie della classe di Scienze Fis., Mat. e Nat., ser. 3^a, Vol. I, Roma*, 1877.
- STRÜVER G. — Forsterite di Baccano. — *Rend. Acc. Lincei, S. IV, Vol. II, fasc. 13^o, Roma*, 1886.
- TERRIGI G. — Le formazioni vulcaniche del bacino romano considerate nella loro fisica costituzione e giacitura. — *Atti della*

- R. Accad. dei Lincei; Memorie della classe di Scienze Fis., Mat. e Nat.; serie 3^a, Vol. X, Roma, 1881.*
- TERRIGI G. — Ricerche microscopiche fatte sopra frammenti di marna inclusi nei peperini laziali. — *Bollettino del R. Comitato Geologico d'Italia, serie 2^a, Vol. VI, n. 5-6, Roma, 1885.*
- TERRIGI G. — Relazione della commissione per lo studio delle acque del sottosuolo della città di Roma. — *Boll. R. Acc. Medica, Anno XIII, 6, Roma, 1887.*
- TSCHERMAK G. — Ueber Leucit von Acquacetosa bei Rom. — *Mineralogische Mittheilungen; Jahrgang, 1876, Heft. 1, Wien, 1876.*
- TUCCI (DI) P. — Saggio di studii geologici sui peperini del Lazio. — *Atti d. R. Acc. d. Lincei; Mem. d. class. d. Sc. Fis., Mat. e Nat. Ser. 3^a, Vol. VI, Roma, 1879.*
- TUCCIMEI G. A. — La geologia del Lazio. — *La Rassegna Italiana, Roma, 1882.*
- TUCCIMEI G. A. — Sulla costituzione geologica del Colle Esquilino in Roma. — *Atti dell' Acc. Pont. dei Nuovi Lincei; Anno XXXVII, Sess. 4^a. Roma, 1884. — Estratto dalle Memorie dell' Acc. Pont. dei Nuovi Lincei, Vol. I, Roma, 1884.*
- TUCCIMEI G. A. — Contribuzione alla geologia dell'interno di Roma. — *Memorie Acc. Pont. dei Nuovi Lincei, Vol. I, Roma, 1886.*
- UZIELLI G. — Sopra lo zircone della costa tirrena. — *Atti della R. Acc. dei Lincei; Memorie della Classe di Sc. Fis., Mat. e Nat., Serie 2^a, Vol. III, Roma, 1876.*
- VERRI A. — Sulla cronologia dei vulcani tirreni, e sull'idrografia della Val di Chiana anteriormente al periodo pliocenico. — *Rendiconto del R. Istituto Lombardo di Scienze, Lettere ed Arti, Vol. XI, Milano, 1878.*
- VERRI A. — Due parole sui tufi leucitici dei vulcani tirreni. — *Bollettino della Società Geologica Italiana, Vol. II, Roma, 1883.*
- VERRI A. — Sui tufi dei vulcani tirreni. — *Boll. Soc. Geol., V. Roma, 1886.*
- VOLPICELLI P. — Sulla Memoria del Sig. Cav. M. S. De Rossi intitolata: Analisi geologica ed architettonica delle catacombe romane. — *Atti dell' Acc. Pont. dei Nuovi Lincei, Anno XVIII, Roma, 1865.*
- ZEZI P. — Escursione ai monti Laziali. — *Programma della R. Scuola d'Applicazione per gli ingegneri in Roma. Roma, 1877.*

ZEZI P. — Indice bibliografico delle pubblicazioni italiane e straniere riguardanti la mineralogia, la geologia e la paleontologia di Roma, con un appendice per le acque potabili, termali e minerali. — *Estr. d. l. Mon. Arch. e Stat. di Roma e d. Camp. Rom. Roma, 1878.*



APPENDIX

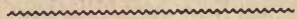
LIPARI ISLANDS

- ACUNTE G. — Veduta del fondo del Cratere del vulcano nell'Isola di Vulcano il 31 agosto 1840. — *A pencil and sepia sketch-plan in my own collection.*
- STURDZA D. DIM. — Insulele Liparice. Conferință ținută în sedinta Adunării generale de la 25 Februarie 1890. — *Buletin Societatea Geografică Română, Anul. al XI^e, Trim. 1, București, 1890, pp. 78-91.*



ETNA

- CHAIX E. — Une course à l'Etna—Genève, 1890. See also: *Bull. Americ. Geogr. Soc. Vol. XIII, March, 1891, pp. 92-101, pl. 3.*



VESUVIUS

- ABICH H. — Geologische Beobachtungen und Bildungen in Unter und Mittel-Italien. — *Braunschweig, 1841, in 4^o, fol. 5, pp. 134 + 11 + 3, table 1, pl. 5, figs. (O. V.).*
- ALSARII CRUCHI VINCENTII. — Vesuvius (1631).—See *Alzario della Croce.*
- ALVINO F. — La penisola di Sorrento descritta. — *Napoli, 1842, in 8^o, figs. (B. N.).*
- AMARO F. (DE) — Aerumni (Vesuvii) anni 1822. Epistola. — *Neapoli, 1823, in 4^o, pp. 12. (Frontisp. with view of Vesuvius engr. by Spani).*
- AMARO F. DE. — Ode (de Vesuvio). — *Neapoli, 1824, in 4^o, pp. 7. (B. N.).*
- AMBROGIO LEONE NOLANO. — La storia di Nola—*In folio, Venezia, 1514. — (In this book is the oldest figure of Vesuvius, and*

on the authority of this author alone depend for evidence those who count an eruption of the mountain in 1500.) (O. V.).

AMBROSIO F. (DE). — La Torre del Greco. (Erupt. 1861). — *Napoli, 1862, in 8°, pp. 8.* (B. N.).

ANONYMOUS. — La morte di Plinio nell'incendio del monte Vesuvio e l'effetto che fece. — *Napoli, 1632, in 8°, fol. 2.* (O. V.).

ANONYMOUS. — Madrigale sopra l'incendio del Vesuvio. — *Napoli, 1632, in 4°, pp. 51. See Perrotti A.*

ANONYMOUS. — Principio e progressi del fuoco osservati giorno per giorno dalli 3 fino alli 25 di Luglio di questo anno 1660 ed esposti alla curiosità de' forestieri. (O. V.).

ANONYMOUS. — Continuazione de' successi del prossimo incendio del Vesuvio con gli effetti della cenere e pietre da quello vomitate, e con la dichiarazione ed espressione delle croci meravigliose apparse in varii luoghi dopo l'incendio. — *Napoli, 1661. (Palmieri says of these two pamphlets "both are very rare, the Duca della Torre did not possess them: no bibliographer of Vesuvius had seen them. Mecatti must have seen the second, because he reproduces the view of the crater contained in it, but cites it with the title "Giornale dell'incendio del Vesuvio" and declares the author to be Dr G. Carpano, or elsewhere he attributes it to Macrino and dedicated to Carpano. See Supo P. (O. V.).*

ANONYMOUS. — Giornale dell'incendio del Vesuvio dell'anno 1660. Con le osservazioni matematiche al molto illustre e molto eccellente signor mio Padrone osservandissimo il Signor D. Gius. Carpano Dottore dell'una e dell'altra legge e nella sapienza di Roma primario professore. A. C. — *Roma, 1660. (This is the Roman edition of the other two articles under the head of "Anonymous" referring to the erupt. of 1660. The author was padre Supo as proved by a M. S. See Supo. P. (O. V.).*

ANONYMOUS. — Continuatione de successi del prossimo incendio del Vesuvio, con gli effetti della cenere; e pietre da quello vomitate, etc. — *Napoli, 1661, in 4°, pl. 1.* (B. N.).

ANONYMOUS. — Vera e distinta relazione dell'incendio ed eruzione del Monte Vesuvio cominiciato al primo di Luglio per fino li 13 del presente anno 1701. Per quello che n'ha ocularmente osservato, e diligentemente notato un Curioso de' Deputati della Terra di Ottajano. — *Napoli, ?, in 8° pl. 2.* (B. N.).

ANONYMOUS. — Declectus Scriptorum rerum Neapolitanarum qui

- populorum, etc. etc. — *Neapoli, 1735, in fol. 6+986+36, (pp. 6 to 10, Vesuvius) with topogr. map, etc.*).
- ANONYMOUS. — Una descrizione del Vesuvio dopo l'eruzione del 1737. — *M. S. (O. V.)*.
- ANONYMOUS. — The Natural History of Mount Vesuvius, with the explanation of the various Phenomena that usually attend the Eruptions of this celebrated Volcano. — *Trans. from the the orig. It., composed by the R. Accad. of Sc. at Naples, by order of the king of the Two Sicilies. London, 1743, in 12°, pl. 2.*
- ANONYMOUS. — Notizie del memorabile scoprimento dell' antica città Ercolano, etc., fino al corrente anno 1718, etc. (Per Anton. F. Gori, — *Firenze, 1748, in 8°, (B. N.)*).
- ANONYMOUS. — Vero e distinto Ragguaglio di ciò che operossi dal Procurador Fiscale, etc. in render vuota la Regal Polveriera della Torre nel dì 7 dello scaduto mese di Dicembre su' l' terribil annunzio, che una spaventevol Fiumana di fuoco scoppiata dal Monte Vesuvio incaminavasi al dì lei danno, e sterminio, etc. — *Napoli, 1755, in 4.° (B. N.)*.
- ANONYMOUS. — Veduta del Vesuvio con l'epigrafe: Oblate ad Sebeti pontem simulacro Januari Coelestis patroni contra erumpentes flammæ stetit incendium vesuvianum; tantique beneficii ergo anno 1767 statua martyri dicatur quam cultor eius Gregorius Roccus Dominicanus populo in spem salutis demonstrat. — *Pl. in 4.° (O. V.)*.
- ANONYMOUS. — Voyage d'un François en Italie. — 1769, in 8°, Vol. 7°, fol. 2, pp. 475. (O. V.).
- ANONYMOUS. — Recherches sur les ruines d'Herculanum. — *Paris, 1770. (O. V.)*.
- ANONYMOUS. — Dissertatio de Vesuvio 1773. — *The writing seems original but the name of the author cannot be understood, M. S. in (O. V.)*.
- ANONYMOUS. — Delle Mofete eccitate dall'Incendio del Vesuvio. — *See Anonymous, Dei Vulcani o Monti Ignivomi, 1779.*
- ANONYMOUS. — Prospetto del Vesuvio dal Palazzo Reale. — *See Anonymous, Dei Vulcani o Monti Ignivomi, 1779.*
- ANONYMOUS. — Vedute del Vesuvio in grande eruzione. — *Without date (1779 ?) R. in fol. (O. V.)*.
- ANONYMOUS. — Breve descrizione geografica del Regno di Sicilia. — *Palermo, 1787, in 4.° (B. N.)*.
- ANONYMOUS. — Istruzione al forastiere, e al dilettante intorno a quanto di antico e di raro si contiene nel Museo del Real Convento di S. Caterina a Formicello de' P.P. Domenicani

- Lombardi in questa Città di Napoli. — *Napoli, 1791, in 4°, pp. 19 (mentions the existence of about three hundred specimens of different lavas, etc. from Vesuvius, in that museum) (B. N.).*
- ANONYMOUS. — Compendio delle Transazioni filosofiche, ecc. — Giornale Letterario di Napoli per servire di continuazione all'Analisi ragionata de' libri nuovi. — *Napoli, 1793, Vol. CXII, in 8°, (vol. V, pp. 78-89).*
- ANONYMOUS. — Considerazioni su i prodotti del Vesuvio. — Compendio delle transazioni filosofiche della Società Reale di Londra. — *Compiled and illustrated by Gebelin. Venezia, 1793, 20 Vols. in 8°, fig. Vol. XVI, pp. 491-495.*
- ANONYMOUS. — Le montagne di basalto sono prodotti vulcanici, o effetti di una cristallizzazione? Compendio delle transazioni filosofiche della Società Reale di Londra. — *Compiled and illustrated by Gebelin. Venezia, 1793; 20 vols. in 8°, fig. Vol. XVI, pp. 495-498.*
- ANONYMOUS. — Avviso al pubblico sull'analisi della cenere eruttata dal Vesuvio (nel dì 16 di Giugno 1794). — ?, loose sheet. (B. N.).
- ANONYMOUS. — Erupt. 1794. — *See Gazzetta Civica Napoletana, N.º 25 and 26, 21 Giugno 1794, in 4°, pp. 163-176.*
- ANONYMOUS. — Due lettere concernenti la morte di Plinio il Vecchio, etc. ed a proposito dell'ultima eruzione de' 15 Giugno 1794 di cui da valente Persona anonima si dà succinta relazione, con descrizione de' danni da essa cagionati e figure in rame. — *Napoli, 1794, in 8°, pl. 1.*
- ANONYMOUS. — La Storia dell'anno 1751. — *Amsterdam, in 8°, Estratta per l'eruzione del 1755, pp. 7, Ibid. dell'anno 1760, pp. 2. Ibid. dell'anno 1779, pp. 3, Ibid. dell'anno 1794, pp. 5. (O. V.).*
- ANONYMOUS. — La Torre del Greco. — *Ode, without Date or l. (1794) fol. 1, in fol. (O. V.).*
- ANONYMOUS. — Lettera seconda del danno accaduto nel paese detto Somma non già del foco; ma di acqua pietre arena e saette che hanno spianato detto paese con Ottajano sin'oggi li 27 giugno 1794. (O. V.).
- ANONYMOUS. — Nuova descrizione de' danni cagionati dal Monte Vesuvio dalla sera de' 15 sino al giorno 28 giugno dell'anno 1794. — ? in 8°, pp. 8. (O. V.).
- ANONYMOUS. — Nuova istoria di una grazia particolare ottenuta da Dio alla città di Napoli, per intercessione di Maria Ss. ed il glorioso S. Gennaro per il Terremuoto sortito la sera dei

12 Giugno, e la grand eruzione del Monte Vissuvio la sera de' 15 del sudetto mese; giorno di Domenica alle ore 2 della notte del 1794. A qual' effetto allagò di foco molti villaggi intorno stendendosi sino al mare con rovinare la gran Terra della Torre del Greco. — ?, in 12. (B. N.).

ANONYMOUS. — Prodigioso miracolo del nostro gran santone e difensore S. Gennaro di averci liberati dall'incendio del Vesuvio e dal terremoto nell'anno 1794. — ? (O. V.).

ANONYMOUS. — Relazione fisico-storica della eruzione Vesuviana de 15 Giugno 1794. — *Gazzetta Civica Napoletana*, N. 25 and 26, pp. 171-175. (B. N.).

ANONYMOUS. — Risposta di un regnicolo ad un suo amico in Napoli sull'eruzione del Vesuvio. — *Napoli*, 1794, in 8°, pp. 7 (B. N.), (O. V.).

ANONYMOUS. — Veduta del Vesuvio in eruzione con fuga dei Torresi. Probably of the year 1794, eccellently drawn. — *Pl. R. in fol.* (O. V.).

ANONYMOUS. — Tragedia Vesuviana. — *In latin verse 1794* M. S. (O. V.).

ANONYMOUS. — Veduta del monte Vesuvio disegnata dal mare dirimpetto alla Torre del Greco dopo che la medesima fu quasi interamente distrutta dalla formidabile eruzione dei 15 giugno 1794. — *Pl. in R. fol. with description* (O. V.).

ANONYMOUS. — Dissertationis Isagogicæ ad Herculaneisium voluminum explanationem, Pars prima. — *Neapolis*, 1797, in *folio*, pp. 5+104.

ANONYMOUS. — Breve catalogo di alcuni prodotti ritrovati nell'ultima eruzione del Vesuvio. — *Giorn. Lett. di Napoli*, 1793-1798, Vol. XLI, pp. 51-55.

ANONYMOUS. — Raccolta di tutte le vedute che esistevano nel Gabinetto del Duca della Torre rappresentanti l'eruzioni del Monte Vesuvio fin oggi accadute, etc. — *Napoli*, 1805, in *oblong folio*, pp. 20, pl. 50. (B. N.).

ANONYMOUS. — Recueil de toutes les vues qui existaient dans le cabinet du Duc de la Tour et qui représentent les incendies du mont Vésuve arrivés jusqu'à présent. — *Naples*, 1805, in 4.° fol. 2, pp. 20, pl. 25. (O. V.).

ANONYMOUS. — Giornale di Napoli. — *Fogli N.º 19 dal dì 21 ottobre al dì 11 novembre, 1822.* (O. V.).

ANONYMOUS. — Descrizione del Viaggio pittorico, storico e geografico da Roma a Napoli, e suoi contorni. — *Napoli*, 1824, in 8°, pp. 190+4. From pp. 187 to 190: *Pianta di una parte dell'antico Cratere ed il Vesuvio.*

- ANONYMOUS. — Eruzione di cristalli di Leucite avvenuta sul Vesuvio. — *Annali Civ. d. Due Sicilie. Napoli, 1833-47. Vol. XLIV, pp. 62-66.*
- ANONYMOUS. — Parere su le Facoltà salutifere dell'acqua termominerali Vesuviana Nunziante. — *Annali Civili del Regno delle Due Sicilie. Napoli, 1833-1847, Vol. VI, pp. 109-111.*
- ANONYMOUS. — Il Vesuvio. — *Album di Roma, 1834, pp. 105-107.*
- ANONYMOUS. — Catalogo della collezione Oritologica ed Oreognosica del fu chiarissimo Professore Cav. Matteo Tondi Direttore del Museo di Mineralogia di Napoli, etc. — *Napoli, 1837, in 8°, pp. VIII + 243.*
- ANONYMOUS. — Guide nouveau de Naples en abrégé, (érupt 1834). — *Naples, 1841, in 12°, pp. 84.*
- ANONYMOUS. — Memoria per la remissione della strada che dal comune di Resina conduce al Monte Vesuvio — *Napoli, 1841, in 4.° pp. 20.*
- ANONYMOUS. — Souvenir du Vésuve. — *Naples, 1841, in 8°, pp. 12. (O. V.).*
- ANONYMOUS. — Tavola cronologica delle principali eruzioni del Vesuvio dall'anno 79 al 1850. — *Atti R. Ist. d. Incorag. a Sc. Nat. Napoli, Vol. IX, at pp. 8, fol. 6.*
- ANONYMOUS. — Giornale di Napoli. — *Fogli n. 24. 22 decembre, 1854 e 1 a 31 maggio 1855. (O. V.).*
- ANONYMOUS. — Preghiera al glorioso martire S. Gennaro. (Erupt. 1855). — *Napoli, 1855. Loose sheet.*
- ANONYMOUS. — Collection complète ou liste des différentes productions du Mont Vésuve. Raccolta compita o sia lista delle differenti produzioni del Monte Vesuvio che si trovano presso il signor Nicola Amitrano. — ? *in 4.° (B. N.).*
- ANONYMOUS. — De Vesuvio Monte nunc scimus fuisse Franciscum Mariano Suaresium Bibliotecharium Cardinalis Barberini. Copiato dal sig. Camillo Minieri dal M. S. che si conserva nella Biblioteca Brancacciana. *M. S. (O. V.).*
- ANONYMOUS. — Dissertazione della vera raccolta o sia museo di tutte le produzioni del monte Vesuvio, etc. — ? *in 4.° (B. N.).*
- ANONYMOUS. — Epigrammata leges et carmina insculpta in Villula et hortulo Joh. Donatus Rogadeus; eques hierosolymitanus emto prædio extruxit Villulam, Leges de Villula et circuneario regundis in XII Tabulas digestae. — *Carmen continens Breviarium legum ad hospites. — Carmen de Vesuvio in fol. pp. 24.*
- ANONYMOUS. — Il Vesuvio Anacreontica. — ? *in 8°, pl. 1. (B. N.).*

- ANONYMOUS. — I Napolitani al cospetto delle nazioni civili, con appendice contenenti, etc. — *See Francesco II.*
- ANONYMOUS. — La miracolosa immagine di nostra Signora del Carmine della Torre del Greco. — (O. V.).
- ANONYMOUS. — La Torre del Greco. Ode. — *Napoli, loose sheet.*
- ANONYMOUS. — Pianta delli confini tra Portici e S. Giorgio a Cremano fatta per ordine del Presidente della S. R. C. di S. Chiara. — *Pl. in R. fol.* (O. V.).
- ANONYMOUS. — Relazione del Vesuvio. — ?, *in 4°.* (B. N.).
- ANONYMOUS. — Sostanze date fuori o sviluppate nelle eruzioni del Vesuvio. — *Il Propagatore delle Scienze Nat. Anno I, P. II, pp. 366.* (B. N.).
- ANONYMOUS. — Supplica alla Maestà del Re delle Due Sicilie (Carlo III.) in nome de' possessori de' territori ne' contorni del Vesuvio. — *Without l. or date.* (O. V.).
- ANONYMOUS. — Touchant le M. Vésuve. — *Extract from Mélanges d'Histoire naturelle, Vol. IV. Without date. in 8°, fol. 13.* (O. V.).
- ANONYMOUS. — Veduta del Vesuvio. — *Three small views attached together.* (O. V.).
- ANONYMOUS. — Vesuviani Incendii Elogium. — ?. *in 4°.* (B. N.).
- ANONYMOUS. — Vulcani di Europa. — *Il Propagatore delle Scienze Nat. Anno I, Pt. II. pp. 328.*
- ARACRI G. — Altra relazione della pioggia di cenere avvenuta in Calabria ulteriore nel detto giorno (27 marzo 1809). — *Mem. Soc. Pontaniana di Napoli. T. I, 1810, pp. 167-170.* (B. N.).
- ARAGO F. — Liste de Volcans actuellement enflammés. — *Annu. d. Bur. Longit. année 1824, pp. 167-189.* (C. A.).
- BACCHI A. — Elpidiani, Civis Romani. De Thermis, etc. — 1588. *Venetis, in fol. fig. pp. 48+49+21.*
- BACCI A. — De thermis; libri septem, etc. — *Venetis, 1571, in fol.* (B. N.).
- BERGMANN T. — Dei prodotti Vulcanici considerati chimicamente con note di Dolomieu. — *Napoli, ?, in 8°, pp. 254, tables 2.* (O. V.).
- BIASE (DI). — Sonetto od ode sul Vesuvio. — *In the "Poesie" of that author.*
- BLONDI F. F. — De Roma instaurata, de Italia Illustrata, de gestis Venetorum, Imperatorum Rom. Vitae, et Conflagratio Vesaei Montis ex Dione. — *Venetis, 1510, in fol. pp. 3+146.*
- BOCCOSI F. — Centurie poetiche. Centuria II, piacevole. — *Napoli, 1714, in 8°, pp. 8+100+5. Sonetto LXXX.*

- BRACCHI D. A. — Una gita al Vesuvio nella notte del 19 al 20 Maggio (1855). — *Poliorama Pittoresco*, N.º 16, *with figs.* (O. V.).
- BRACCI G. — Veduta del Vesuvio interiore nel 1755, pl. in 4.º — *It is the 22^d pl. of the Raccolta delle più interessanti vedute della città di Napoli e luoghi circonvicini disegnate da Giuseppe Bracci ed incise in 30 rami da Antonio Cardoni.* (O. V.).
- BREISLAK SCIP. — Topografia fisica della Campania. — *Firenze*, 1798, in 8º, pp. XII+368, III pl. (pp. 104-203).
- BRIGNOLE (COMTE DE). — Lettre a S. E. le Comm. Bianchini, avec réponse. — ? 1858, in 8º, pp. 3.
- BROOKE. — On Montecellite. — *Philos. Mag.* 1831.
- BRUNO F. S. — Regolamento del Prefetto di Polizia per le Guide volgarmente dette Ciceroni. — *L'Osservatore di Napoli*, 1854, in 12º.
- BRYDONE M. — Voyage en Sicile et à Malthe traduit de l'anglais par M. Demeunier. — *Amsterdam et Paris*, 1775, vol 2º in 8º; Vol. 1. pp. XVI+419; Vol. 2, pp. 400+4; another edition accurately corrected, on the second english edition. By M. B. P. A. N. Neuchatel, 1776, contains pp. 263-272 a: Lettre de M. Brydoné au P. della Torre sur une éruption du Vésuve.
- BYLANDT (LE COMTE DE). — Résumé préliminaire de l'ouvrage sur le Vésuve. — *Naples*, 1833, in 8º. (B. N.).
- CHAIX E. — Une course à l'Etna. — *Genève*, 1890. See also: *Bull. Americ. Geogr. Soc.* Vol. XXIII, March, 1891, pp. 92-101, pl. 3.
- CAESII B. — Mutinensis è Soc. Jesu. Mineralogia, sive naturalis philosophiae Thesauri etc. — *Lugduni*, in fol. pp. 16+626+69. See pp. 118-122, *Vesuvio*, etc.
- CALÀ C., DUCA DI DIANO E MARCHESE DI RAMONTE. — Memorie storiche dell'apparitione delle Croci prodigiose. — *Napoli*, 1661, in 4º, pp. 12+189+25.
- CAMPOLONGO E. — La Vulcaneide. — *Napoli*, 1766, in 8º, pp. 52.
- CAPACII J. C. — Neapolitanae Historiae. Tomus primus in quo antiquitas, etc. — *Neapoli*, 1607, in 4º, pp. 24+900. From pp. 449 to 460, *del Vesuvio* etc.
- CAPACII J. C. — Historiae, etc. — *Neapoli*, 1771, vol. II, in 4º, figs. Vol. I, pp. 7+312. See Vol. II, pp. 500. See Vol. I, pp. 78-93, *del Vesuvio*, etc.
- CAPACII J. C. — Antiquitates et Historiae Neapolitanae. — *Lug-*

- duni Balavorum, in fol. on 2 columns, with portrait, pp. 8+194+6. pl. X.*
- CAPECE-MINUTOLO F. — Al sempre invitto pretettore della Città di Napoli, S. Gennaro. — *Sonetto*. — ?, *loose sheet*. (B. N.).
- CAPECE-MINUTOLO F. — Per l'eruzione del Vesuvio accaduta ai 15 Giugno 1794. Canzone. — ?, *loose sheet*. (B. N.).
- CAPMARTIN DE CHAUPY ABB. — Découverte de la Maison de Campagne d'Horace. — *Rome, vols. III, in 8°, with topogr. map. Vol. I, pp. 102, and follow. de' Vulcani, del Vesuvio, etc.*
- CAPOCCI E. — Investigazioni delle interne masse vulcaniche dai loro effetti sulla gravità. — *Atti del Reale Istituto d'Incoraggiamento alle scienze naturali di Napoli. Napoli, 1811-1863. Vol. IX, pp. 215-229.*
- CAPOCCI E. — Viaggio alla Meta, al Morrone ed alla Majella. — *Annali Civile del Regno delle Due Sicilie. Napoli, 1833-47, Vol. VI, pp. 112-125.*
- CAPOCCI E. — Su di un poco noto fenomeno vulcanico. — *Rend. R. Acc. Sc. Fis. Mat. Napoli, T. V, 1846, pp. 14-18.*
- CAPOCCI E. — Catalogo de' tremuoti avvenuti nella parte continentale del Regno delle Due Sicilie posti in raffronto con le eruzioni vulcaniche ed altri fenomeni cosmici, tellurici, meteorici, etc. — *Atti d. R. Ist. d. Incoraggiamento alle Sc. Nat. Napoli. Vol. IX, pp. 335-421. (B. N.). Vol. X, pp. 293-327.*
- CARLES, FLAMINIO MARTINO DI. — Ottave sopra l'incendio del Monte Vesuvio. — *Napoli, 1632, in 12°. (B. N.).*
- CARLETTI N. — Storia della regione abbruciata in Campagna Felice in cui si tratta il suo sopravvenimento generale, e la descrizione de' luoghi, de' Vulcani, de' Laghi, de' Monti, delle Città litorali, e de' popoli che vi furono e vi sono, etc. — *Napoli, 1787, in 4°, pp. XLIII + 382, pl. 1. (B. N.).*
- CARUSI G. M. — Tre passeggiate al Vesuvio. — *Napoli, 1858. (O. V.).*
- CASTALDI-CERASI J. — Inscriptiones in solenni celebritate Divi Januarii Curiae Montanae vertente secennio. — *Napoli, 1798, in 4°.*
- CERASI. — 1798. — *See Castaldi-Cerasi.*
- CHICCHIO F. X. (DE). — Dissertatio de Vesuvio — *sub disciplina d. Josephi Vairo Academiae Neapolitanae Lectoris qui finem imposuit Kalendis Iuniis in vespertis corporis Christi anno bisextili 1768, M. S. (O. V.).*
- CORRADO M. — Descrizione (Nuova) de' danni cagionati dal Monte Vesuvio dalla sera de' 15, sino al giorno 28 di Giugno del-

- l'anno 1794, e della somma religiosità de' cittadini napoletani. — *Napoli, 1794, in 12°.* (B. N.).
- CRISCONII P. A. — Vesuvi Montis elogica inscriptio. — *Napoli, 1634, loose sheet.* (B. N.).
- DAU LUIGI. — Dettaglio dell'antico stato ed eruzione del Vesuvio colla relazione dell'eruzione de' 15 giugno 1794 di F. M. D. C. A. T. — ? *in 8° pp. 16.* (O. V.).
- DOGLIONI N. — Anfiteatro d'Europa etc. — *Venetia, 1623, in 4° with portrait. pp. 72-1377. See pp. 993. Dell' Ethna detto Mongibello e sua historia. pp. 694. Del Monte di Somma, e sua historia.*
- DOMIZI F. S. (RINALDO). — Prodigioso miracolo del nostro gran difensore S. Gennaro d'averci liberati dall'incendio del Vesuvio, e dal terremoto la sera del dì 15 Giugno 1794. — *Napoli, 1794, in 8°.* (B. N.).
- DURINI B. — Conghiettura geologica sulla cagione dei Vulcani. — *Dal Giornale Enciclopedico di Napoli, 1841; in 8°, pp. 23.* (O. V.).
- FABIO GIORDANO. — De Vesuvio Monte. — *Copied by Miniere M. S.* (O. V.).
- FALCO B. (DE). — Antiquitates Neapolis, atquae etc. — *Lug. Bat. in fol. pp. 48.—This is the oldest guide of Naples in which Vesuvius and La Solfatara are mentioned.*
- FAZZINI G. — Cenno sulla pozzolana della Baia di Napoli. — *Napoli, 1857, in 4°.*
- FREDA G. — Sulla composizione di alcune recenti lave vesuviane. — *Gazz. Chim. Il., Anno XIX, 1. Palermo, 1889.*
- FREDA G. — Sulla costituzione chimica delle sublimazioni saline vesuviane. — *Gazz. Chim. Il., Anno XIX, 1. Palermo, 1889.*
- GENNARO A. DI. — 1.^a lettera. Raccolta di monumenti sopra l'eruzione del Vesuvio seguita nell'agosto, 1779. — *Giornale delle Arti e del Commercio, Vol. I, Macerata, 1780, in 8°, at pp. 141 and following.* (O. V.).
- GENOVESI AB. — Raccolta di lettere scientifiche ed erudite dell'Ab. (Genovesi). — *Napoli, 1780, in 8°, pp. 247. Letter 7th, Account of the last eruption of Vesuvius, 1779. At the end of this are eight verses of P. Ant. de Sanctis, selected from the work of the same entitled: Il Mostruoso parto del Monte Vesuvio ora dal volgo detto il Monte Diavolo la cui mostruosità è qui descritta. — Napoli, 1632.*
- GIOENI G. — Saggio di litologia Vesuviana. — *Napoli, 1791* (O. V.).
- GIORDANO G. — Fossili Marini sul Vesuvio. — ? (O. V.).

- GIOVENE G.—Discorso meteorologico-campestre per l'anno 1794.—?,
in 4°, (B. N.).
- GIROS S. — Continuazione delle notizie riguardanti il Vesuvio.—?,
in 8°, (B. N.).
- GIUDICE (F. DEL). — Brevi considerazioni intorno ad alcuni più
costanti fenomeni vesuviani. — *Atti del Reale Istituto d'In-*
coraggiamento alle scienze naturali di Napoli. Napoli, 1811-
1863, Vol. IX, pp. 1-67.
- MALLET R. — On some of the conditions influencing the projec-
tion of discrete solid materials from volcanoes and on the
mode in which Pompei was overwhelmed. — *Journ. R. Soc.*
Ireland, Vol. XIV, pt. 3, 1876, in 8°, pp. 144-169. (C. A.).
- SCILOPIS F. — Prospetto Generale della città di Napoli dedicata
a Sua Ecc.^a Giorgianna, Vicecontessa Spencer. — *Two pano-*
ramas in 6 sheets engraved Erupt. 1760. (Collect. of
M.^r Tell Meuricoffre of Naples.



INDEX

- Abbreviations, 91
 Accademia delle Scienze of Acireale, 44
 Accad. Gioenia, 43
 Aci, 41
 Aci and Galatea, 40
 Acicastello, 10, 37, 41, 42
 Acireale, 8, 9, 37, 38, 43, 44
 Acireale, Mayor of, V
 Aci S. Filippo, 43
 Aci Trezza, 42
 Acqua Caselle (Drinking water), 78, 81
 Acqua Caselle—Posto Bancone, 81
 Acqua di Salomone, 80
 Acqua Ferrata, 74, 80, 81
 Acqua Grassa, 10
 Acqua Sulfurea, 77, (Plate XVI)
 Acque Albule, 32, 83, 84, 85
 Aeolian Islands, 9, 29, 59, 60, 63, 64, 65, 66, 67, 97 to 104
 Aerolite, 40
 Agglomerates, 64
 Agnano, (Lake of) 14, 75
 Alban Hills, 28, 29, 30, 90, 92, 305 to 320
 Albano, 30, 31
 Algiers, 66
 Alicuri, 29, 62
 Alluvial fan, 56
 Alluvium, 31, 50, 76, 79
 Alpine Club (Neapolitan section), 91
 Alps, 35
 Alum, 5
 Alumina, 14
 Amianthus, 68
 Amore, Comm. N., VI, 25
 Amore, Cav P., 25
 Amphibole, 20, 49, 51, 54
 Analcime, 10, 49
 Analcimite, 10, 40
 Aniene, 84, 86, 87
 Animal matter, 20
 Andesite, 11
 Anorthite, 40, 48
 Appenines, 46
 Aptien, 21
 Aquiferous strata, 6, 149
 Aragonite, 39, 40
 Arch of Drusus, 87
 Armstrong Works, 17
 Artesian boring, 47
 Arso, 23
 Aspromonte, 1
 Astiano, 60
 Astroni, 14, 15
 Atrio del Cavallo, 17, 18, 20, 26, 48, 50, 52
 Augite, 2, 26, 41, 48
 Augite andesite, 26
 Auvergne, 35
 Avellino, 48
 Avernus (Lake of), 15, 17
 Axis, 16, 26, 52, 56, 57
 Bagnara, 70
 Bagni, 32
 Bagni Caldi, 63
 Bagnoli, 15
 Bagno Secco, 63
 Baja delle Pomice, 70
 Baja (peninsula), 15
 Balzo, 38, 39
 Baranco, 50, 53
 Barco, 87
 Bartolomeo (guide), 66
 Basalts, 7, 8, 10, 26, 37, 41, 43, 47, 61, 70, Pl. XII
 Basile, Prof., 43
 Basilica Julia, 32
 Basiluzzo, 2, 62
 Bassani, Prof. F., VI, 14, 20, 21, 22, 28
 Baths, III, 16, 21, 31, 77, 79, 80, 81, 82, 86
 Beach, 17.
 Bellini theatre, 18
 Benevento, 48, 65
 Bergman, 68
 Biancavilla, 10, 11
 Biancavilla, Mayor of, V, 11

- Bibliographers, 89 to 92
 Bibliographical list, V, 89 to 331
 Bibliography, 89 to 331 Maps, charts, plans and models, 93 to 95. Lipari or Eolian islands 97 to 104, 321 Grahams Island, Isola Ferdinanda or Isola Julia 105 to 107. Etna 109 to 164, 321. Vesuvius, 165 to 261, 321 to 331, Campi Phlegreai and Campanian plain 263 to 299. Roccamonfina and Sujo 300 to 303. Alban Hills 305 to 320
 Biotite, 20
 Birds, 85
 Blake, Prof. J. F., 69
 Blowholes, 7
 Blue Grotto, 22
 Bocca il Viulo, 55
 Bombs, 4, 5, 7, 12, 17, 20, 59, 69
 Bone, 20
 Boracic acid, 5
 Boselli, Comm. N., V, 34
 Botta, Sig., VI
 Bottaro, 2, 62
 Bread-crust structure, 4, 5, 59
 Breccia, 19, 25, 28, 50
 Breislak, 47
 British Association, III, 18
 British Eclipse Expedition of 1870, 40
 Brook, 63, 77, 78
 Bucca, Dr., 25, 26, 28
 Butler G. W., 32
 Bytownite, 48
 Cable, 64, 65
 Calabria, 59, 70
 Calcite, 28
 Caldaje, 2, 3, 62
 Camaldoli della Torre, 55
 Camaldoli (Naples), 13, 14, 15, 48
 Camaldoli (Roma), 30
 Campagna Romana, 84
 Campania, 16, 19, 20, 27, 45, 46, 47, 48, 75, 263, to 299
 Campiglione, 15, 16
 Campi Phlegreai, 12, 14, 15, 46, 90, 92, 263 to 299
 Campo Bianco, 3, 6, 7, 68, 69, 70, 71
 Campo Bianco, formation of, 6
 Campo di Annibale, 30
 Canada balsam, 2
 Canale dell' Acqua Zolfà, 85
 Canale di Arena, 54
 Canneto, 2, 64
 Capo di Bove, 29
 Capo Milazzo, 64
 Capo Molini, 40, 41
 Capo Orlando, 60
 Capri, 13, 21, 22, 23, 48
 Capri (Mayor of), 22
 Caprine, 87
 Carbon dioxide, 6, 11, 32, 49, 62, 77, 78, 83, 84, 85
 Carnevale, Sig. T., V
 Casa del Bosco, 12
 Casamicciola, 22, 23
 Casamicciola, Mayor of, VI
 Casoria Prof., 80
 Castagna, 71
 Castelforte, 79, 82
 Castelgandolfo, 31
 Castellammare 21, 28, 47
 Castello d' Ischia, 23
 Castello Manfredo, 28
 Castle of Lipari, 2
 Castle of St. Angelo, 32
 Catacombs, 29
 Catania, 8, 10, 12, 34, 37, 43, 91
 Caves, 21
 Cecilia Metella (tomb of), 29
 Cerio, Dr., VI, 22
 Certosa, 29
 Chabasite, 41
 Chalcedony, 39
 Chalcopyrite, 40
 Chalybeate water, 80
 Chemical precipitation, 83
 Chimney, 16, 49, 50, 52, 55, 56
 Christopher Columbus, 60
 Ciclopita, 40
 Cigliano, 15
 Cimino, S.g. 79, 82
 Circus of Maxentius, 29
 Clay, 10, 19, 30, 41, 42, 43, 46, 51
 Clay metamorphosed, 40
 Cleavage, 43
 Clerici Dr., VI, 28, 30
 Climate, 37
 Clionia, 31
 Coast line, 15, 21, 31
 Collections, 17, 22, 28
 Colletargo, 31
 Colliseum, 32, 86
 Columnar structure, 9, 10, 21, 25, 27, 40
 Conglomerates, 17, 51, 74
 Concretionary, 52, 85
 Cone, 5, 6, 8, 9, 12, 15, 16, 18, 20, 25, 26, 29, 30, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 61, 62, 67, 74
 Cones parasitic, 9, 11, 23, 26, 30, 48, 50, 55
 Copiapite, 14
 Coquimbite, 5, 14
 Cozza P., 64
 Crater, 4, 5, 6, 8, 12, 15, 16, 22, 23, 26, 30, 31, 49, 50, 51, 52, 53, 54, 59, 60, 61, 62, 63, 66
 Craterets, 6
 Crater-lake, 31
 Crater-plain, 8, 27, 30

- Crater rings, 8, 18, 23, 24, 25, 26,
 30, 53, 61, 63
 Cremate, 23
 Cretaceous, 22, 28, 75
 Crustacea, 85
 Cupa, 57
 Cupa Pallarino, 18
 Currents, 67
 Cyclopean islands, 10, 40
 Cyclopean walls, 81
 Cyclopote, 40
 Cyclops, 62
 Datilo, 2, 62
 Daubeny, III
 Dejection cone, 56, 57
 Dell' Erba, Prof., VI
 Delphos, 63
 Demarchi, Cav. Ing., VI, 29, 31, 32,
 33, 34, 88
 Demeste, 68
 De Nicola, Sig., VI
 Denudation, 49
 De Sanctis F. 82
 Dini On., VI, 20
 Diopside, 40
 Dissolved water, 6
 Dohrn, Dr. A., VI
 Dolerite, 2, 6, 8, 9, 40, 61
 Dolomieu, 41, 68, 69
 Dolomite rhombohedra, 40
 Dome, 2, 23, 26, 62
 D'Orvè, Cav., 79, 82
 Downthrow, 21
 Drew, Dr., 33
 Duratorre, Sig., 79, 82
 Dust volcanic, 2, 5, 7, 8, 14, 16, 19,
 26, 27, 48, 50, 51, 52, 53, 60, 67,
 68, 70, 75
 Dyke, 7, 9, 10, 11, 40, 17, 18, 25,
 45, 48, 51, 55, 77
 Earth-pillars, 23
 Earthquake, 23, 53, 92
 Eiffel, 35
 Eisig Dr., VI, 13
 Ejectamenta, 20, 49, 51, 53, 54, 57, 69
 Ejected Blocks, 18, 28, 31, 45, 47, 50
 Electric discharges, 5, 66
 Elephants, 43
 England, IV
 Eolia, 60
 Eolian, see Aeolian
 Eolus, 62
 Epsomite, 21
 Era A., 46
 Era B., 48
 Era C., 49
 Era D., 54
 Erosion, 19, 56, 57
 Eruptions, 16, 19, 20, 26, 37, 48, 49,
 50, 51, 52, 53, 54, 55, 56, 57, 60,
 61, 62, 64, 65, 66, 67, 69, 71.
 Escarpments, 45, 46, 48, 52
 Establishment, thermo-mineral, 9, 21
 Este, Cardinale d', 86
 Etna, 9, 10, 11, 12, IV, V, 37, 38,
 41, 43, 46, 69, 92, 109 to 161
 Excursion secretary, IV
 Extramarine fauna, 37
 Extramarine flora, 37
 Extratelluric, 49, 54
 Eucalyptus, 29
 Eunotia gracilis, 38
 Ewing, III
 Faiano, 20, 25
 False-bedded, 52
 Faraglioni, 5
 Faraglione Grande, 49
 Farnesina, 30
 Faro, 60
 Fault, 21, 76
 Favare, Marchese di, VI, 11
 Fayalite, 70
 Felspar, 42, 48, 49, 51, 69, 70, 77
 Ferrero, 76
 Ferruginous Water, 40
 Fichi d'India, 67
 Filicuri, 29, 62
 Fingal's Cave, 39
 Fiorite, 6
 Fissure, 19, 21
 Fletcher, Rev. J. C., VI, 22
 Flow-structure, 19
 Fluorides, 20, 21
 Fluoriferous, 75
 Fondo di Ciglio, 14
 Fontana di Trevi, 87
 Forgia Vecchia, 5, 64, 71
 Formicoli, 62
 Fossa Castagna, 68
 Fossa dell' Acqua, 38
 Fossa della Monaca, 55
 Fossa Lupara (Naples), 14, 18
 Fossa Lupara (Nocera), 20
 Fosse, 87
 Fossiliferous concretions, 16
 Francolisi, 76.
 Frascati, 29, 30
 Fresh-water diatoms 38
 Fumarole, 2, 63, 64
 Fuorigrotta, 15
 Gaeta, 48, 82
 Gaeta, gulf of, 46
 Ganges, 65
 Garigliano, 73, 75, 76, 77, 78, 79
 Garnet, 41
 Garofali, 27
 Gaseous emanations, 46, 76, 77, 78,
 79, 80, 83, 85
 Gas fissure, 6
 Geikie, III

- Genzano, 31
 Geode, 28
 Geological Society, 31
 Geologists, III, 17, 85
 Geologists' Association, III, V, 31, 35, 64, 82
 Gemmellaro, 40, 41
 Geyser, 80
 Giardini Station, 8
 Glass, 6, 69, 70
 Gorge, 73, 79, 80
 Graham's island, 60, 91, 92, 105 to 107
 Grande Inferno, 77, 79
 Granite, 68, 69
 Gray, III
 Great Britain, IV
 Greek statuettes, 2
 Greely M.r Robert, 65
 Gregorio, 64
 Grit-stones, 74
 Grotta degli Archi, 11
 Grotta del Cane, 14, 77
 Grotta delle Palumbe, 9, 39 (pl. XIII)
 Gypsum, 14, 79
 Haematite, 6, 40
 Halotrichite, 5, 11
 Hamilton, 40
 Hannibal, 30
 Haüyne, 31
 Heather, 62
 Hephestiades, 62
 Herculanæum, 53
 Herschelite, 10, 41
 Himantidium gracile, Ehrb., 38
 Hippurites, 28
 H₂O, 39, 49, 54, 56
 Holmes T. V. Esqr., 31, 33
 Homeric poems, 40
 Hornblende, 39
 Human remains, 85
 Hungary, 35
 Hydraulic apparatus, 79
 Hydrochloric acid, 83
 Hydrofluosilicic acid, 20
 I Canteroni, 50, 52
 Iceland, 35, 42
 Il Piano, 8
 Implements, 22
 Inclusions, 19, 69, 71
 Intratelluric minerals, 19, 51
 Iodine, 79, 80
 Iron, 77
 Iron water, 80
 Ischia island, 16, 22, 28
 Isles of the Blessed, 61
 Istituto Geologico, 28
 Italian volcanic region, III
 John, pope, 63
 Johnston Lavis, D.r, 31, 33, 34, 41, 42, 45, 57, 59, 64, 66, 69, 73, 89
 Judd, Prof., III, 2, 59, 61
 Jurassic, 22
 Jupiter Latium, 30
 Kaolin, 14
 Labradorite, 48
 Lachea, 40
 Lacustrine Basin, 38, 76, 84, 85
 Lagno, 57
 Lago d'Agnano, 14, 75
 Lago della Regina, 85, 86, 87
 Lago delle Colonelle, 85
 Lake, 76
 Laminated structure, 19
 Lanciani, Prof. R., VI, 31, 33, 34
 La Petra, 62
 Lapillo, 2, 8, 10, 18, 20, 25, 26, 48, 49, 52, 54, 56
 Lapis tiburtinus, 83, 86
 Laitine, Rev. Prof., 27
 La Sommata, 7
 Lattani, 26
 Lavas, 2, 5, 7, 8, 9, 10, 11, 12, 16, 17, 19, 20, 22, 23, 24, 25, 27, 29, 37, 38, 39, 43, 45, 47, 48, 49, 50, 51, 54, 55, 56, 57, 60, 61, 62, 64, 67, 69, 70, 75, 76, 80
 Lavis, Madame Antonia F., 89
 Lavis, Marcus, 74
 Leucite, 25, 26, 27, 29, 47, 48, 50, 51, 53, 54, 55, 56, 74, 77
 Leucitite, 25, 26
 Leucitophyres, 74
 Leucotephrite, 25, 26, 74
 Liasic strata, 1, 31, 84
 Lignite, 68
 Lime, 77, 85
 Limestone, 13, 20, 21, 31, 46, 51, 53, 73, 75, 76, 77, 78, 83, 84, 85, 86
 Linden, Mr., VI, 13
 Lipari, 5, 8, 62, 63, 64, 65, 66, 70, 71
 Lipari, Mayor of, V.
 Lipari Islands, IV, 1, 28, 29, 43, 59, 61, 91, 92, 97 to 104
 Liparite, 2, 61
 Liri, 76
 Lisca Bianca, 2, 3, 62
 Lisca Nera, 2, 62
 Lithia, 77
 Lithodomi, 31, 40
 Lithophysae, 70
 Livy, 30
 Lobley J. L., 57
 London, IV
 Lucrinus, lake of, 15, 17
 Lyell, III, 41
 Madonna del Tufo, 30
 Maggiorani, Sigi., VI, 31
 Magma, 4, 16, 19, 38, 39, 42, 49, 50, 52, 56, 77
 Magnesia, 77

- Magnetite, 40, 48, 51, 70, 77
 Maione, Dr., VI, 22
 Mallet, III
 Mammalia, 85
 Mammelon, 26, 62
 Maps (geological), 50, 51, 56, 93 to 95
 Marbles, 28
 Marine fauna, 37
 Marine flora, 37
 Marine terraces, 17
 Marino, 31
 Marl, 68
 Maronti, 23
 Massa di Somma, 50
 Megazini, Sig., 13
 Meli, R. Prof., VI, 30, 31, 33
 Mellilite trachyte, 22
 Mercalli Prof., 64
 Mesotype, 39, 41
 Mesozoic, 33
 Messina, 1, 8, 12, 64, 71
 Metamorphism, 20, 31, 77
 Micas, 49, 51
 Microliths, 19, 48, 49, 51, 53, 54, 61
 Mignano, 27
 Mills, 63, 77, 80, 81, 86
 Milne, III
 Milo, 39
 Mineralogical Museum, 24
 Mineral water springs, 33
 Minister of Posts and Telegraphs, IV, V, 27
 Minister of Public Instruction, IV, V, 14
 Minturno, 74
 Models, 10, 93
 Moderni P., 25, 26, 76
 Mofete, 77, 80
 Mohrhoff, Dr. F., VI
 Molara, 23
 Monaco, Father, VI
 Montagna delle Pietre Nere, 63
 Montagnone, 22
 Monte Barbaro, 15, 16, 17
 Monte Calvario, 15
 Monte Cassino, 27, 28
 Monte Cavo, 30
 Montecelio, 31
 Monte Clirica, 6, 68
 Monte Cornicolani, 84
 Monte Cortinelli, 26, 73
 Monte Corvara, 15
 Monte della Guardia, 66
 Monte dei Porri, 61
 Monte Dolce, 15
 Monte Gemmellaro, 12
 Monte La Frascara, 26, 73
 Monte Luccio, 7
 Monte Massico, 46
 Monte Mazzacarusio, 64
 Monte Nuovo, 15, 16
 Monte Olibano, 15
 Monte Pelato, 2, 6, 7, 68
 Monte Porzio, 30
 Monte Procida, 15
 Monte Rosa, 2
 Monte Rossi, 12
 Monte Rotaro, 22
 Monte St. Angelo a Tre Pizzi (Castellammare), 5, 53
 Monte S. Angelo (Lipari), 2, 64, 68.
 Monte S. Croce, 26
 Monte Santo, 18
 Monte Saraceno, 8
 Monte Silvestro, 28
 Monte Somma, 13, 18, 20, 24, 26, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 73, 76
 Monte Spina, 15
 Monte Tabor, 22
 Monte Tiburtini, 84
 Monte Tuscolo, 29
 Mosche, 68
 Mother-pumice, 69
 Moya, 57
 Mud, 57, 65
 Mudstones, 51
 Mud volcanoes, 10
 Municipality of Naples, 18, 22, 23
 Museum breccia, 16, 18
 Mysterious islands, 60
 Naples, IV, 12, 13, 14, 18, 19, 20, 21, 22, 23, 25, 28, 32, 33, 45, 47, 77, 82
 Naples, Gulf of, 13, 16, 46
 Naples, Mayor of, III
 Narlian A. E. Esqr., V, 3
 National Museum, 13, 18
 Natrolite, 41
 Neapolitan district, 14
 Nemi, Lake of, 31
 Neocomian, 21
 Nepheline, 20, 29
 Neptune, 8, 33
 Neptune (Temple of), 17
 Nesbitt, Cav. L. VI
 Nicea (synod), 64
 Nicolosi, 12
 Nifo, 24
 Nisida, 15
 Nizzeti, 41
 Nocera, 29, 21
 Noctiluca miliaris, 67
 Norway, 35
 Nymphis, Temple of, 17
 Observatory of Etna, 12
 Observatory of Vesuvius, 17, 59
 Obsidian, 3, 4, 5, 7, 8, 59, 64, 69, 70
 Obsidian flakes, 2
 Olivine, 39, 42, 48
 Olivine basalts, 7

- Olivine trachyte, 23
 Opal, 39
 Oppenheim, 22
 Opuntia ficus indica, 67
 Orbitulina-marls, 21
 Organic Matter, 85
 Oscillation of land-level, 14, 15, 17
 Ostermoor, G. W. L. Esqr., VI, 22
 Palace of Tiberius, 22
 Palazzo della Cancelleria, 87
 Palmarola, 41
 Panaria, 2, 62
 Parker's Hotel, 13
 Pastore, Sig. C. VI
 Paterno, 10
 Patrician Simmaco, 63
 Pebbles, 17, 70
 Pedimentina, 26
 Pelagonite tuff, 10, 16, 41
 Pellati N., 88
 Pennisi, Sig. i, V, 9
 Peperino, 31
 Perera, 71
 Periods, 49, 50, 51, 52
 Perrey, Alexis, 91
 Phases, 20, 26, 46, 48, 49, 50, 51, 53,
 55, 56, 57
 Phillips J., 57
 Phillipsite, 10, 41
 Phonolite, 16
 Phosphates, 75
 Piano del Lago, 11, 12
 Pianura, 15, 16, 18, 19, 20
 Piazza del Duomo, 39
 Picone, Signor, 65
 Pietritroccoli, 25
 Piperno, 16, 18, 19, 20, 48
 Pipernoid, 16, 18, 19, 20, 21, 25,
 27, 75
 Piscicelli O., VI, 27
 Pisolite, 20, 52, 53
 Platania, Sig. Gaetano, V, 1, 9,
 Platania, Sig. Giovanni, V, 1, 9, 64
 Plateau, 8, 21
 Plinian eruption, 52
 Pliny, 53
 Pliocene, 10, 30, 31, 46, 60, 84
 Polypheinos, 40
 Pomigliano d' Arco, 47
 Pompeii, 19, 20, 52, 53
 Ponte Elio, 87
 Ponte Lucano, 87
 Ponticelli, 47, 48
 Porcellanite, 70
 Porphyritic inclusions, 19, 51
 Portis, Prof., VI, 28, 29, 30, 31, 32, 33
 Porto di Levante, 2, 8
 Porto d' Ischia, 22
 Port of Ulysses, 40
 Posilippo, 15
 Post-pliocene, 41
 Potash, 75, 77
 Pott, 58
 Potter G., 34
 Pozzolana, 16, 29, 39
 Pozzuoli, 15
 Pre-eruptive, 51
 Presenzano, 76
 Procida, 22
 Projectiles, 2, 4
 Pumice, 2, 4, 6, 7, 14, 16, 18, 19,
 20, 21, 25, 26, 43, 45, 47, 49, 50,
 51, 53, 55, 59, 60, 61, 63, 65, 67,
 68, 69, 70, 71
 Pumiceous scoria, 26, 47, 54
 Punta dell' Asino, 7
 Punta della Castagna, 2
 Punta della Trovatina, 7
 Punta del Nasone, 53
 Puzzillo, 38
 Pyrite, 40
 Pyroxene, 20, 40, 42
 Pyrrhotite, 40
 Qualiano, 15
 Quarry, 16, 20, 28, 29, 31, 32, 74,
 80, 87
 Quaternary, 51, 84
 Quartz, 12, 69, 70
 Quartz-trachyte, 61, 62
 Raciti, Sig. Gaetano, 38
 Rain-fall, 57
 Ravines, 51, 56
 Realgar, 5
 Reitana, 43
 Renda Sig. Gaetano, V
 Reyer, Prof., 2
 Reykjanes, 42
 Rhyolite, 2
 Riardo, 76
 Riccio, Comm. tore L., 90
 Riva di Quaglia, 18
 River course (change of), 76
 Rocca di Papa, 30
 Rocca Jovina, 28
 Roccamonfina, IV, 25, 73, 74, 76,
 77, 90, 301 to 303
 Roccamonfina, Mayor of, VI
 Roscatagliata, Dr., VI, 22
 Rocche Rosse, 2, 7, 70
 Rocks, igneous, III
 Romans, 17, 28, 29, 30, 32, 79
 Rome, 23, 29, 31, 32, 34, 82, 86, 87, 90
 Sabatine Hills, 28
 Sabrina, 60
 Sage, 68
 Salbands, 40
 Salerno, 48
 Salina, 60, 61, 62
 Salse, 10
 Salts, 85

- Sambon, Dr. A., 13, 18, 19
 Sambon, Dr. L., IV, 31, 33, 34, 35, 74, 82, 92
 Sand, 2, 4, 46, 52, 54
 Sandstone, 51
 Sanidine, 51, 54
 Sanitation Works, 33
 Santorin, 60
 S. Angelo (Pozzuoli), 7, 15
 S.ta Anna, 40
 S.ta Tecla, 37, 38
 S.ta Venera al Pozzo, 43
 S. Bartolomeo, 65, 66, 71
 S. Brandon's island, 61
 S. Chiara, 13
 S. Calogero, 63
 S. John in Lateran, 29, 87
 San Martino, 14
 S. Paolo Fuori Muri, 29
 S. Patrizio, 64
 S. Pietro (church), 29, 87
 Saracens, 65, 66, 73
 Sarno, 21
 Savorgnan de Brazza, Count, VI, 32, 33
 Scacchi, Prof. A., VI, 24
 Scafa di Mortola, 80
 Scalanohedra of Calcite, 40
 Schist, 68, 69
 Sciarra, 1, 2, 29
 Scilla, 1
 Scoglio Faraglione (Eolian Islands), 61
 Scolecite, 41
 Scoria, 3, 8, 10, 16, 20, 26, 27, 29, 39, 47, 48, 49, 50, 51, 54, 55, 56, 57, 67, 68, 69, 70, 75
 Scoriaceous pumice, 49, 54
 Scrope, III
 Sea bottom, 23, 46
 Sedimentary rocks, 21
 Seguenza, Prof., 60
 Seguenza, Sig., V
 Seismological instruments, 10
 Seismologists, III
 Selenite, 21
 Senga di Campania, 15
 Serapis, Temple of, 14, 16
 Serpulae, 40
 Serra Piccola, 26
 Sessa Aurunca, VI, 24
 Shearing planes, 20
 Shells, 85
 Sibilla, 22
 Sicardo, 65
 Sicily, 59, 60, 67
 Siderite, 40
 Silica, 14, 77
 Silica, vermicular, 39
 Silicates, 20, 47, 51
 Silt, 42
 Silvestri, Prof. O., IV, V, 8, 9, 10, 11, 12, 43
 Siren, 33, 63
 Smoke, vortex rings of, 2
 Spherulites, 5, 7
 Soccavo, 15, 16, 18, 19
 Soda, 77
 So. dell'Arpa, 7
 Soffione, 77, 80
 Solfatara, 12, 14, 15, 62, 77, 80
 Somma-Vesuvius, 14, 25, 47, 48
 Sorrento, 21, 22, 25
 Sorrentine peninsula, 13, 14, 21, 22, 53
 Soundings, 65
 Spa, 79, 81, 82
 Spallanzani, 34, 41, 68, 69
 Sparanise, 24
 Spartacus, 52
 Spatuzzi, Prof., V, 24, 33, 82
 Specular Haematite, 39
 Sperrone, 29
 Sphaerosiderite, 39
 Spherulites, 70
 Springs, 10, 11, 21, 32, 63, 64, 73, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85
 Stabiae, 53
 Stabilimento delle Quattro Torri, 75, 79, 82
 Stabilimento della Provincia, 79, 80, 81
 Staffa, 39
 Starza, 16, 17, 47
 Stazzo, 38
 Steam-caverns, 20
 Strabo, 52
 Straits of Messina, 1
 Stromboli, 1, 29, 46, 60, 61, 62, 66, 69
 Strombolicchio, 62, 69
 Strüver Prof., VI, 28
 Stufe, 63
 Stufe di San Germano, 14
 Sublimates, 46
 Submarine volcanoes, 59, 65
 Subvolcanic platform, 51
 Sujo, 73, 75, 77, 80, 81, 82
 Sulphates, 14
 Sulphur, 5, 10, 21, 28, 77, 79, 85, 86
 Sulphuretted hydrogen, 32, 62, 77, 78, 83, 85
 Sulphuro-calcareous water, 83, 85
 Sulphurous acid, 83
 Sulphur water, 21, 78, 80, 81
 Tamburrini, Prof., VI
 Taormina, 1, 8
 Tartaro, 84
 Taverna S. Felice, 76
 Teano, 76

- Tellini, Dr., VI, 28, 31
 Temple di Fortuna Virile, 87
 Temple of Serapis, 14
 Tenerife, Peak of, 70
 Terraces, 85
 Terra di Lavoro, 20, 24, 46, 82
 Testaccio, 23
 Theatre of Marcellus, 86
 Theodoric, 63
 Thermae, Pl. XV, 44, 79
 Thermo-mineral establishment, 9
 The Splendid, 63
 Thompsonite, 40
 Tiber, 86, 87
 Timpa, 38
 Timpa della Scala, 39
 Timpa di Mortara, 38
 Timpa di Tamaso, 40
 Timpa di S.ta Caterina, 40
 Timpa of S.ta Tecla, 38
 Titans, 60, 71
 Tittoni, On. T., VI,
 Tivoli, 32, 83, 84, 86, 87
 Tivoli, Mayor of, VI,
 Tomei, Cav., VI, 32
 Tori Sichi, 27
 Tortoises, 85
 Trachyte, 2, 7, 8, 15, 16, 19, 22, 23,
 26, 47, 48, 61, 62, 74
 Trachyte domes, 2, 23
 Travertine, 32, 33, 83, 84, 85
 Travertine (cost of), 87, 88
 Tre Fontane, 29
 Tremolite (fibrous), 40
 Trezza, 10
 Triassic strata, 1
 Tridimite, 70
 Trifoglietto, 9
 Tripergola, 16
 Tufts, 37, 38, 42, 14, 15, 16, 18, 19,
 20, 21, 23, 25, 26, 27, 33, 48, 53,
 68, 71, 74, 75, 76, 77, 84, 86
 Tunnels, 74, 80
 Tunis, 66
 Tusculum, 29, 30
 Tyrol, 35
 Ultrabasic rocks, 51
 Ulysses, 40
 University, 17, 24
 Upthrow, 21
 Ustica, 62
 Val Calanna, 9
 Val di Bove, 9, 37, 43
 Val d'Inferno (Vesuvius), 52
 Valle Ariccia, 31
 Valle dell'Inferno (Roma), 30
 Valle di Sujo, 73
 Vallerio, 68
 Valleys, 49, 50, 53, 56, 57, 63, 73,
 76, 79, 84, 87
 Vallone, 57
 Vallone Grande, 50
 Vallone Pollena, 50, 57
 Val Sanseverino, 50, 51
 Val Von Buch, 51
 Vapour, 5, 18, 50, 52, 53, 62, 64,
 66, 67, 69
 Vegetable impressions, 31, 81, 85
 Vegetable soil, 6, 51
 Vercillio, Cap. VI, 22
 Vesicles, 4, 51, 52, 54, 55, 69, 71
 Vesuvius, 18, 20, 23, 24, 25, 45, 46,
 47, 48, 53, 54, 56, 61, 90, 91, 165
 to 261
 Via Appia, 29
 Via Domitiana, 79
 Via Numinis, 30
 Via Tiburtina, 86
 Vico Equense, 21, 25
 Villa Adriana, 87
 Villa Belvedere, 39
 Villa Gregoriana, 33
 Villa San Giovanni, 1
 Villa Tragara, 22
 Vitreous, 61
 Vivara Island, 22
 Vivianite, 39
 Volcanic chimney, 2
 Volcanic deposits (old), III
 Volcanic neck, 77
 Volcanoes, 10, 15, 16, 18, 19, 27, 28,
 29, 30, 32, 45, 46, 47, 48, 49, 51,
 52, 54, 56, 61, 62, 63, 64, 76, 83,
 89, 91, 92
 Voltaite, 14
 Vomero, 14, 18
 Von Lassaulx, 41
 Von Richthofen, 70
 Vortex rings of smoke, 2
 Vulcan, III, 8, 62
 Vulcanello, 5, 8, 60, 62, 63, 66
 Vulcaniae, 62
 Vulcano, 1, 3, 4, 7, 8, 29, 46, 59,
 60, 61, 62, 63, 64, 65, 66, 69, 71
 Vulcanologists, III
 Wacke, 25
 Weathering, 51, 79
 Whirlpools, 8
 Xiphonia, 44
 Yellowstone Park, 70
 Zafferana, 9
 Zeolites, 10, 41
 Zezi, Sig. P., VI, 28, 29, 30, 31, 32,
 33, 83, 91
 Zoological Station, 12

ERRATA

Page	Line	For	Read
5	— 14.	the upper part,	, the upper part
7	— 23.	broom, brush.	broom bush,
26	— 18.	Vesuvian	vesuvian
33	— 13.	Cavalicri	Cavalieri
34	— 14.	Count G. T.	Count G. S.
47	— 7.	conclusion.	conclusions
»	— 19.	adition	addition
»	— 21.	conferm.	confirm
48	— last	consequitive	consecutive
49	— 36.	constituent.	component
51	— 28.	varietes.	varieties
55	— 36.	in.	is
59	— 3.	More recently	More recently
»	— 13.	obsi-dian	obsidian
»	— 15.	i	is
»	— 15.	at.	as
60	— 31.	cratnric	crateric
61	— 40.	varietes.	varieties
62	— 35.	Liparites	Lipariotes
63	— 1.	hygrometic	hygrometric
»	— 14.	Do know you	Do you know
64	— 8.	wither	whither
67	— 5.	thuunder	thunder
»	— 8.	set	(omit)
»	— 16.	censequence	consequence
68	— 13.	workes	working face
»	— 23.	threaten	threaten
69	— last line of note —	encountred	encountered
71	— 32.	behinwen	behind, when
73	—	The note at bottorn of page to page 74	
74	— 33.	Else, where	e'sewhere
78	— 38.	Authoritès	authorities
80	— 18.	precipe	precipice
82	— 2.	inaccessibile	inaccessible
84	— 19.	time	lime
85	— 8.	lake of the	of the lake
86	— 31.	limestones.	limestones *
91	— 7.	looks.	brooks
»	— 13.	Cav.	Comm. ^e
»	— 21.	endebtet	indebted
»	— 29.	he	be
93	— 1.	an	and



Johnston-Lavis Phot.

THE CRATER AND THE "SCIARRA" OF STROMBOLI. JUNE 1887.

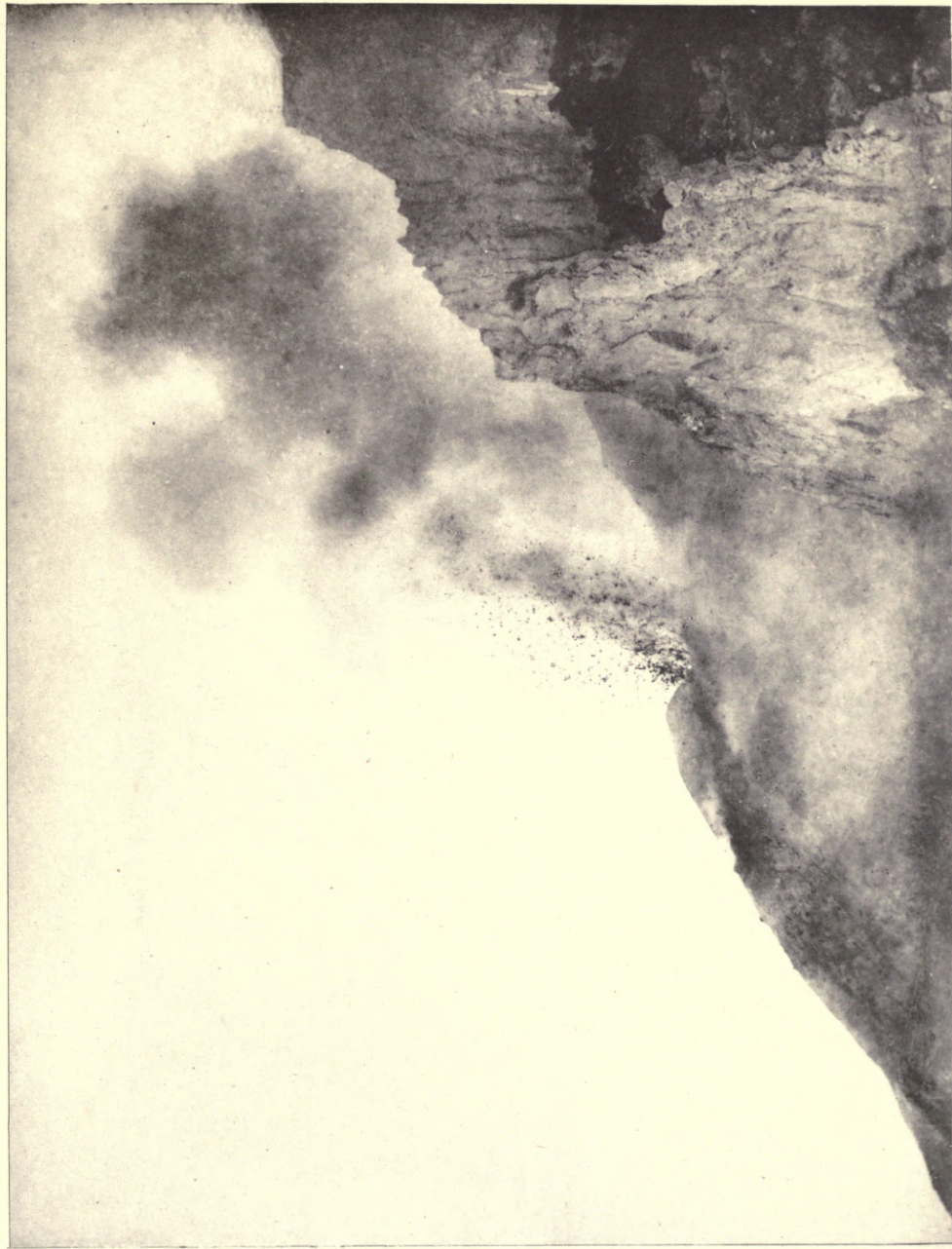
Danesi Reprod.



Johnston-Javis Phot.

Danesi Reprod.

RIDGE ABOVE CRATER, CRATER AND COMMENCEMENT OF THE "SCIARRA" OF STROMBOLI SEEN FROM THE W. SIDE IN JUNE 1887.



Johnston-Javis Phot.

Danesi Reprod.

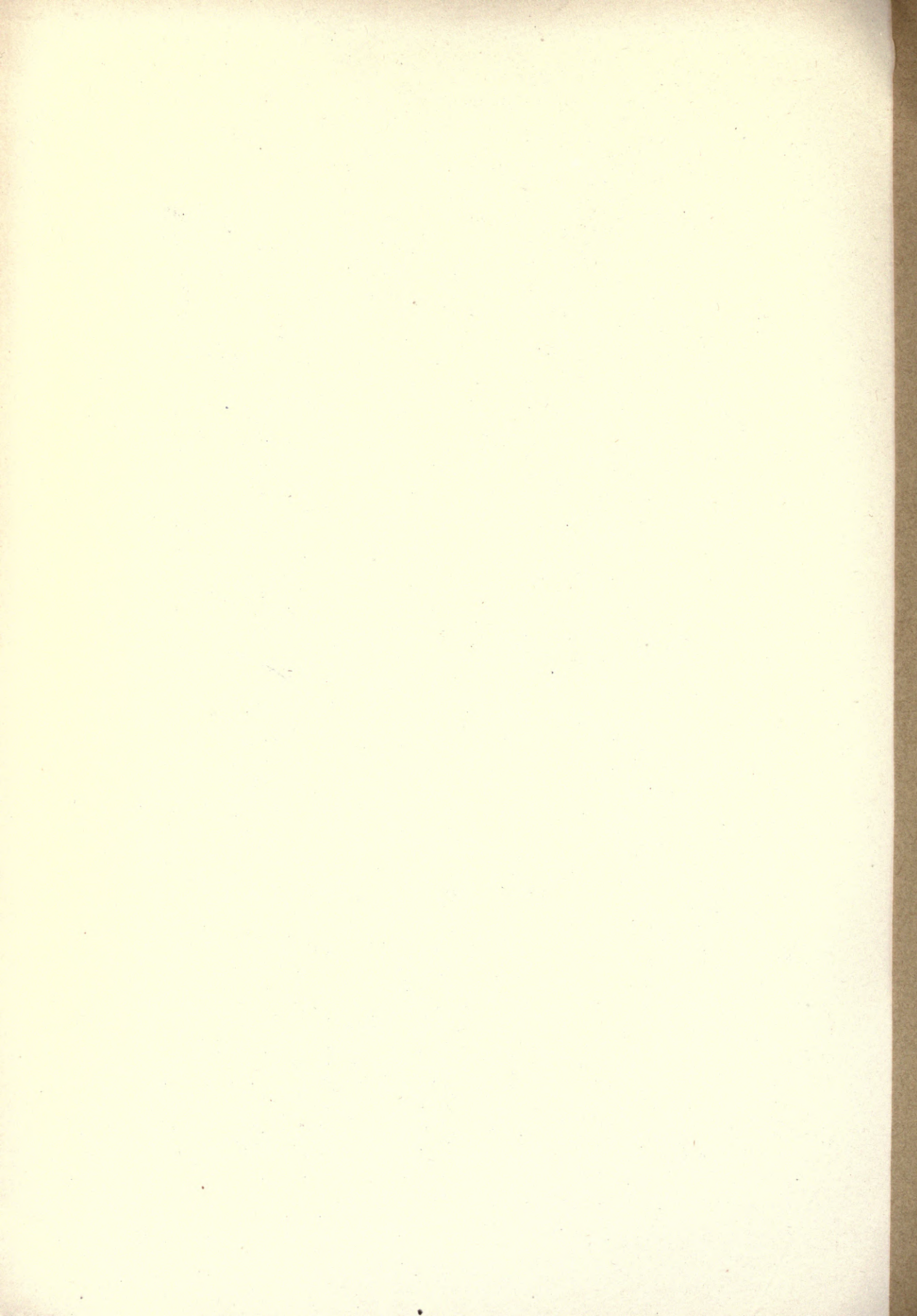
CRATER OF STROMBOLI SEEN FROM W. SIDE DURING AN EXPLOSION SEPT 19TH 1889.



O. Silvestri Phot.

Danesi Reprod.

AN EXPLOSION FROM CRATER OF VULCANELLO FEB. 14TH 1889, 4.15 P. M.

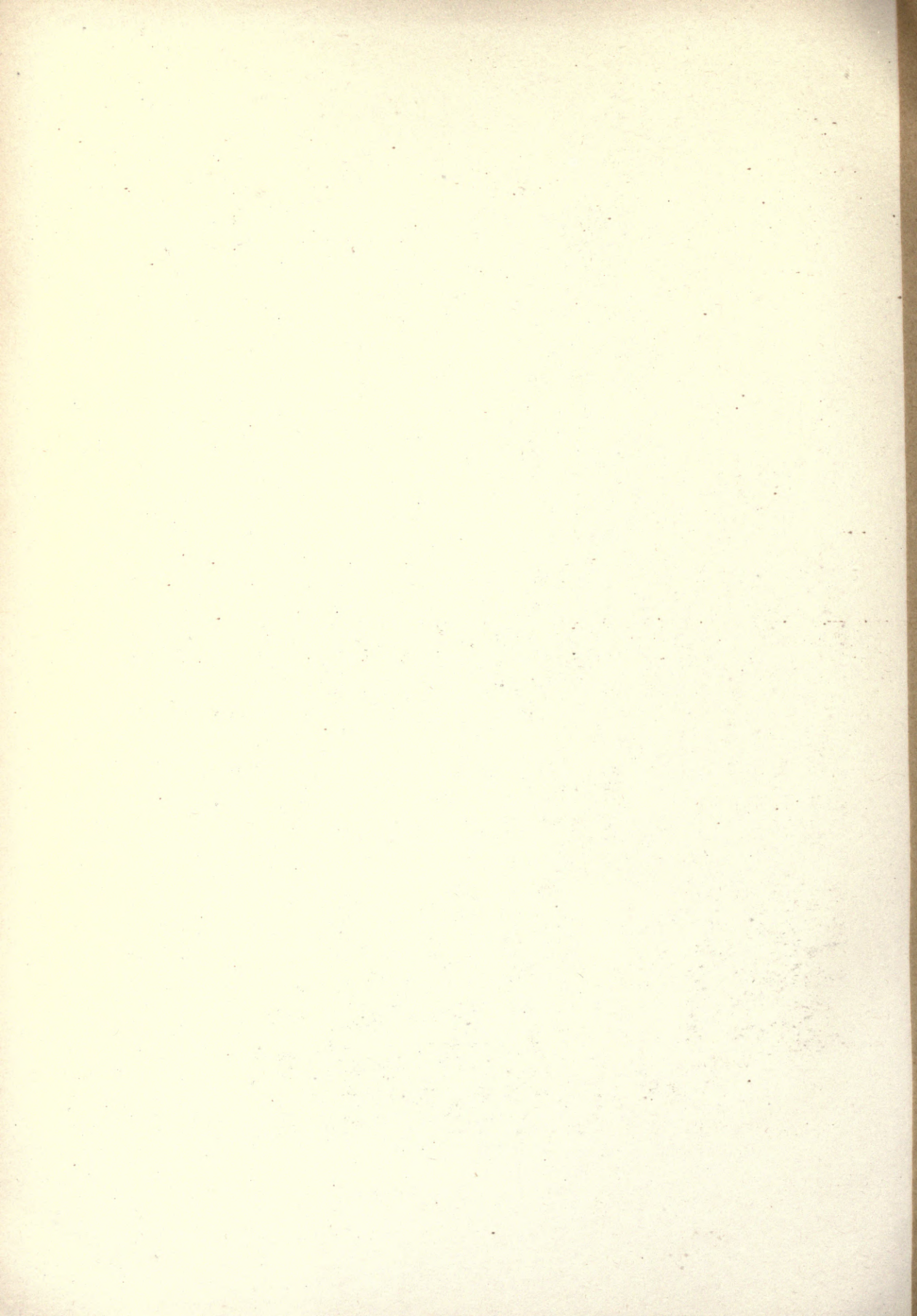




Johnston-Lewis Phot.

Danesi Reprod.

INT. OF CRATER OF VULCANO SEEN FROM N.W. EDGE ON SEPT 21ST 1889 BETWEEN THE EXPLOSIONS.

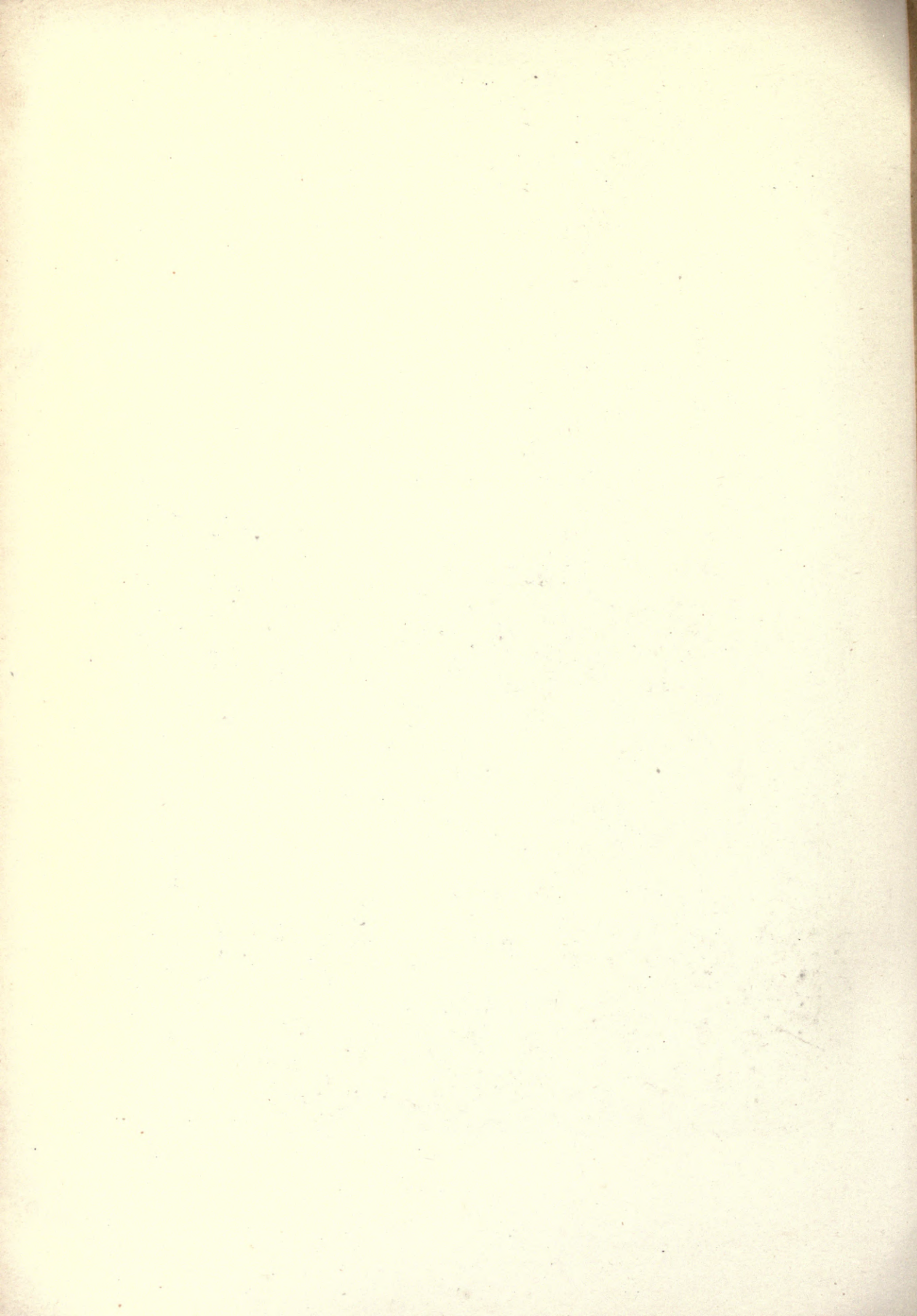




Johnston-Davis Phot.

Danesi Reprod.

SAME AS LAST WITH COMMENCEMENT OF EXPLOSION.





Johnston-Lavis Phot.

Danesi Reprod.

SIMILAR TO LAST AT A MORE ADVANCED STAGE.



Johnston-Lavis Phot.

Danesi Reprod.

SAME EXPLOSION AS LAST ABOUT 30 SECONDS LATER.



Johnston-Lavis Phot.

Danesi Reprod.

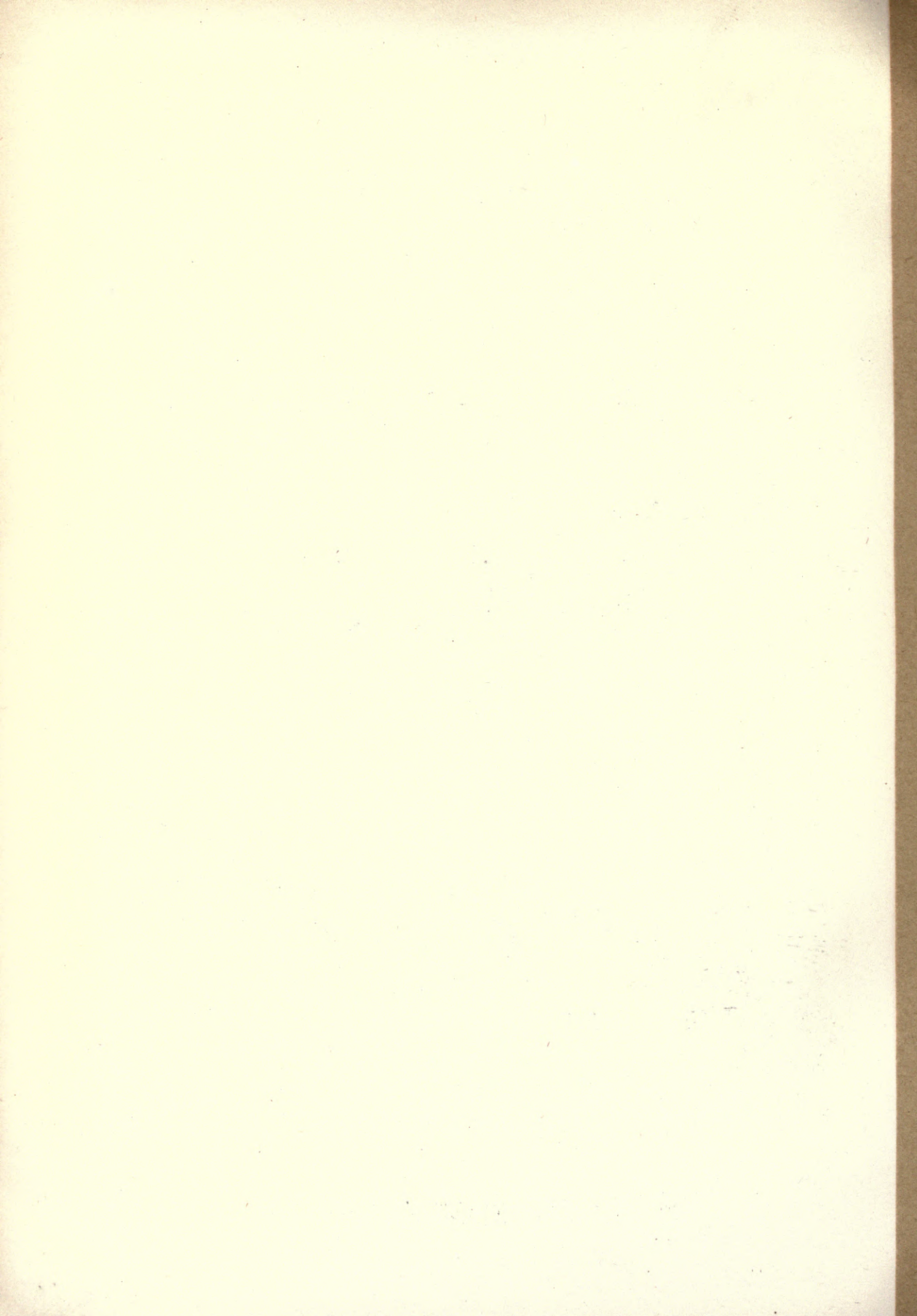
EXPLOSION FROM VULCANO AS SEEN FROM S. END OF THE PLATEAU
OF THE ISLAND ON SEPT 23RD 1889.



Colverton-Lewis Phot.

Danesi Reprod.

SAME EXPLOSION AS LAST ONE MINUTE LATER.





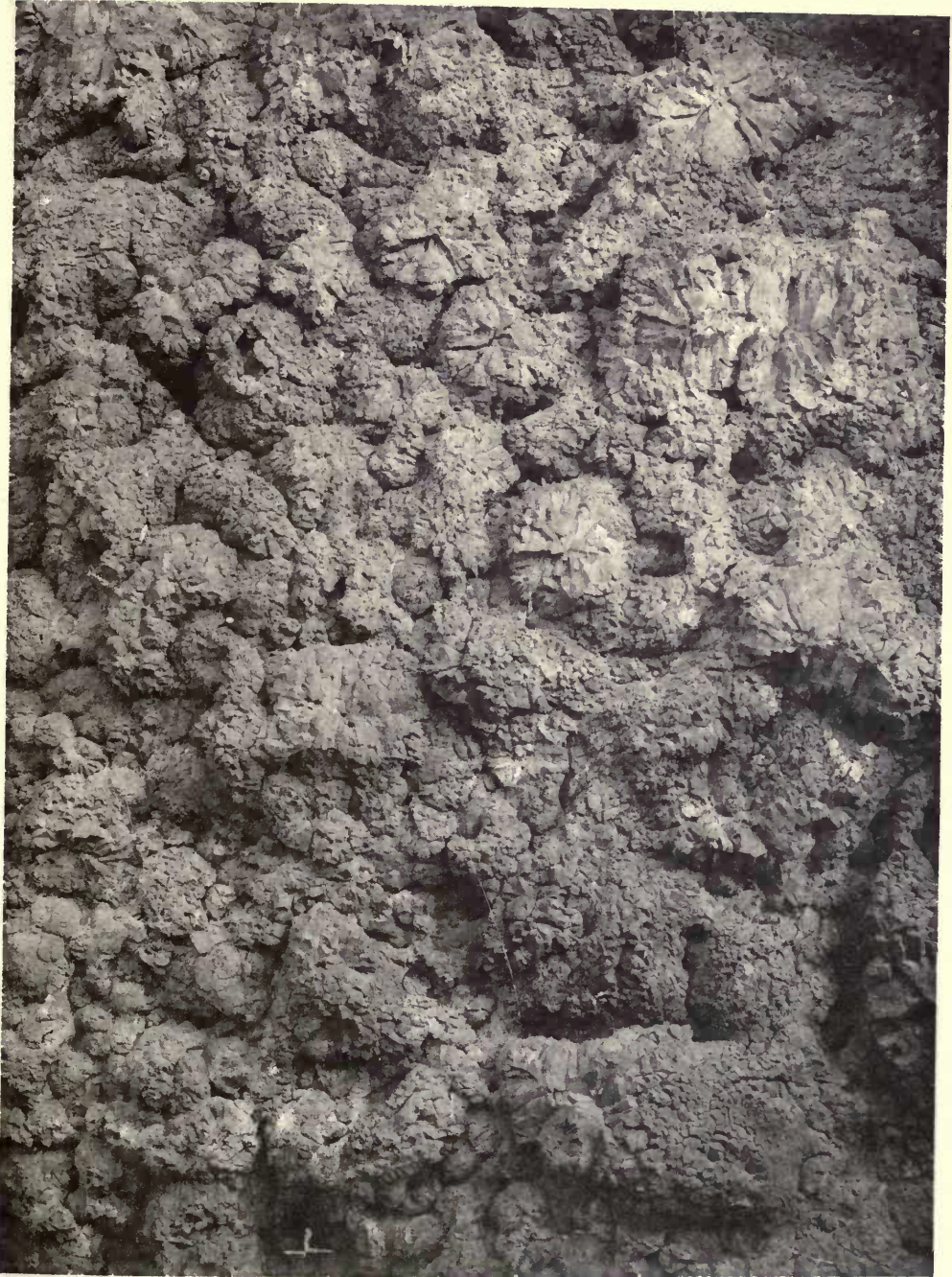
CONE OF VULCANELLO WITH S.S. "VILLA SAN GIOVANNI" SEPT. 23



G. S. Eanson Phot.

Danesi Reprod.

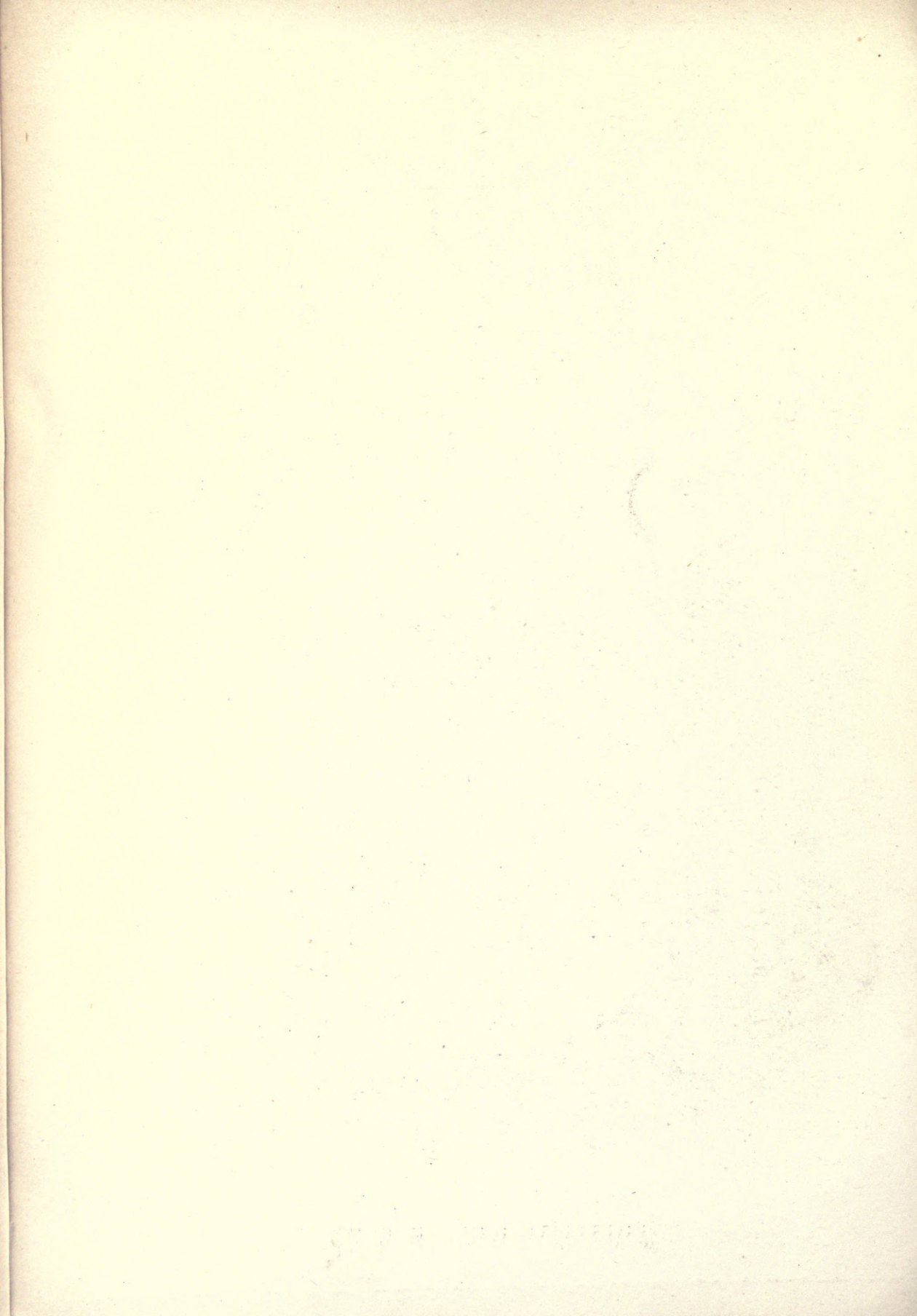
BREAD-CRUST BOMB EJECTED FROM CRATER OF VULCANO AND STILL
HOT ON SEPT. 21ST 1889, ON PLAIN N. OF CONE



Johnston-Lavis Phot.

Danesi Reprod.

GLOBULAR BASALT UNDER CASTLE OF ACI-CASTELLO





Johnston-Javis Phot.

Danesi Reprod.

COLUMNAR DOLERITE LAVA OF ETNA, GROTTA DELLE PALOMBE, ARCIREALE.

HOUSE AND FACTORY
OF M. MARLIAN

PARAGIONE
PORTO DI LEVANTE

MONTE DELLA GUARDIA
DI LIPARI

VULCANELLO

MONTE LENTIA

MONTE S. ANGELO

ALICURI

ELICURI

SALINA

VINYARDS

LIPARI

PORTO DI PONENTE

PORTO DI LIPARI

MONTE ROSA

PANARIA BASILIZZO STROMBOLI

CONE OF VULCANO



DANESI LITH.

PANORAMA OF THE LIPARI ISLANDS AS SEEN FROM THE N.W. LIP OF THE CRATER OF VULCANO (1887)

FROM A PANORAMIC PHOTOGRAPH BY H.J. JOHNSTON-LAVIS

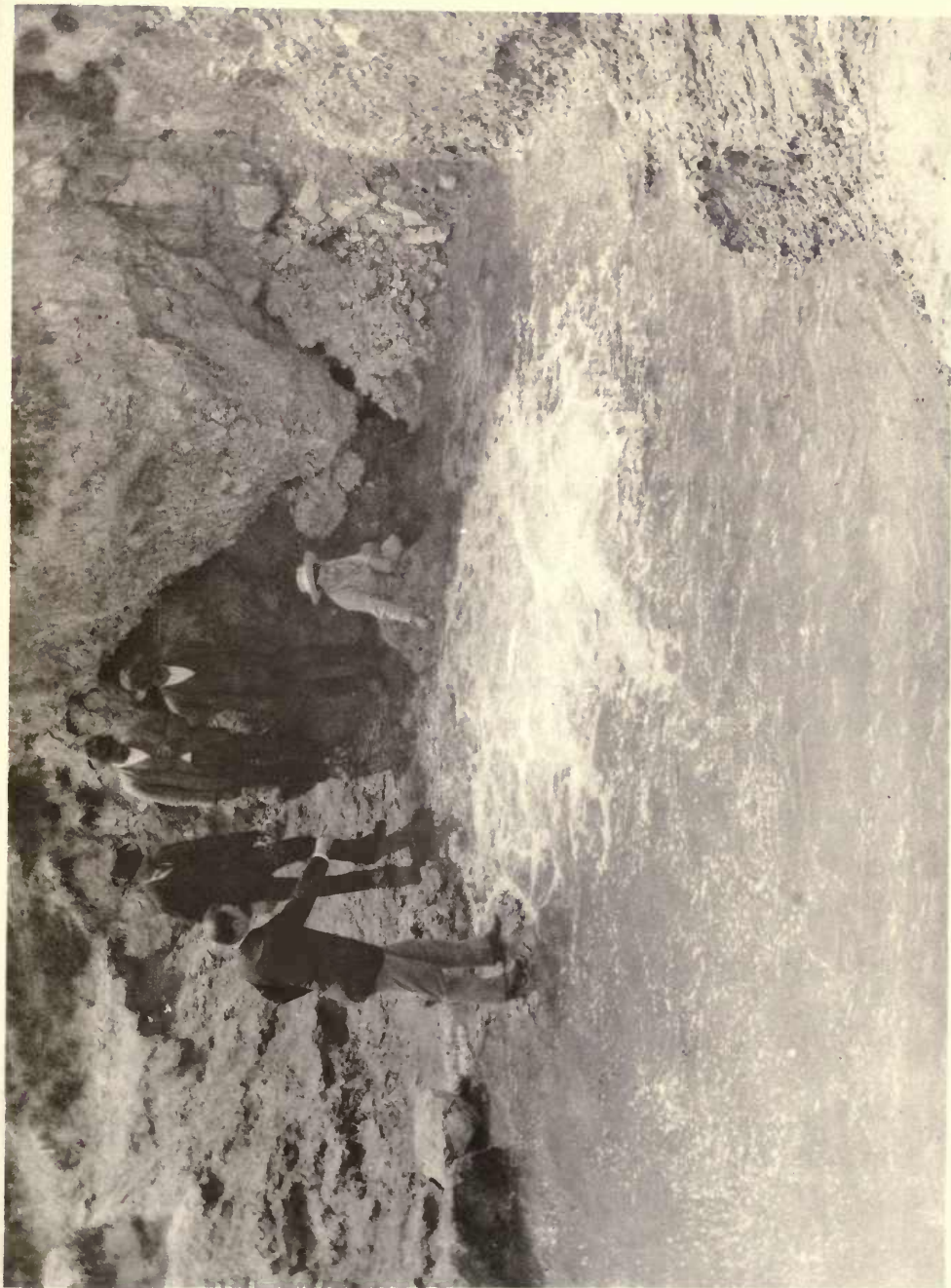


Johnston-Javis Phot

Danesi Reprod.

RUINS OF ANCIENT ROMAN BATHS OF SUJO

MAY 1891



Johnston-Lavis Phot.

Danesi Repr.

ACQUA CASELLE BELOW THE STABILIMENTO DELLE QUATTRO TORRI OF SUJO

MAY 1891

RETURN EARTH SCIENCES LIBRARY
TO →

642-2997

LOAN PERIOD 1 1 MONTH	2	3
4	5	6

ALL BOOKS MAY BE RECALLED AFTER 7 DAYS
Books needed for class reserve are subject to immediate recall

DUE AS STAMPED BELOW

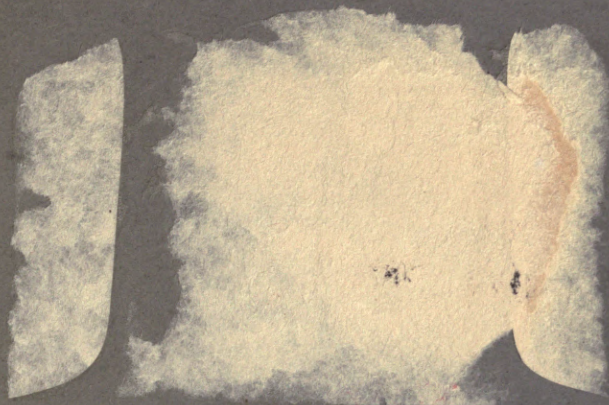
FORM NO. DD8

UNIVERSITY OF CALIFORNIA, BERKELEY
BERKELEY, CA 94720

-531



storage



WORKS BY THE SAME AUTHOR

STILL ON SALE

1883. Notices on the Earthquakes of Ischia of 1881 and 1883. In 8.^o pp. 55, with a map. Naples 1883 Lire 2.50
1884. The Geology of Monte Somma and Vesuvius, being a Study in Vulcanology. — *Quart. Journ. Geol. Soc. London, Vol. XL, pp. 35 to 112.* With 2 woodcuts and a chromolithographic plate. » 3.—
1885. Monograph of the Earthquakes of Ischia. A memoir dealing with the Seismic Disturbances in that Island from Remotest Times, with Special Observations on those of 1881 and 1883. London, Dulau, and Naples, Furchheim, 1885, royal 4.^o, pp. X—112, with 20 photo-engravings, 2 large maps in colour, 3 lithographic plates and 1 chromo-lithographic plate. » 40.—
1887. Diario dei fenomeni avvenuti al Vesuvio da Luglio 1882 ad Agosto 1886. — *Lo Spettatore del Vesuvio e dei Campi Flegrei. — Nuova Serie pubblicata a cura e spese della Sezione Napoletana del Club Alpino Italiano.* Napoli 1887, Furchheim, in-4.^o, pag. 81-103 con 13 foto-incisioni. » 20.—
1891. Geological Map of Monte Somma and Vesuvius, constructed during the years 1880 to 1888. Scale 1:10,000, or 6.33 inches to the mile. In six sheets with a Pamphlet entitled: A Short and Concise account of the Eruptive Phenomena and Geology of Monte Somma and Vesuvius. London, George Philip and Son, 1891 » 52.—